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ABSTRACT

This problem deck contains over 150 problems related to the module "Using Tables to Solve Problems." The problems are presented at five levels of difficulty and contain four basic types of two-dimensional tables: (1) constant sum; (2) constant differences; (3) constant quotient or ratio; and (4) constant product. (MP)

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USING TABLES

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SE 026 905

1BC1

If you can complete the table, you can solve the problem.

COMPLETE THE TABLE.

Number of tricycles	5		20					
Number of wheels		30		24	300			

2BC1

7 drips of water from this faucet weigh 1 gram.

COMPLETE THE TABLE.

Drops	7						
Grams	1	2	3	5	9	10	15

T 1BC1

Tricycles	5	10	20	8	100
Wheels	15	30	60	24	300

T 2BC1

Drops	7	14	21	35	63	70	105
Grams	1	2	3	5	9	10	15

3BC1

COMPLETE THE TABLE.

Meters	5	10		30	35	
Seconds	8		32			80

4BC1

When this screw is turned 5 times, it moves into the wood 1 centimeter.

COMPLETE THIS TABLE.

Turns	5	10	15	20	25	30	35
Distance (cm)	1						

T 3BC1

Meters	5	10	20	30	35	50
Seconds	8	16	32	48	56	80

T 4BC1

Turns	5	10	15	20	25	30	35
Distance (cm)	1	2	3	4	5	6	7

T 5BS1

1. 9 turns
2. 20 feet

T 6BM1

Your table could include these entries:

Wagons	1	2	3	4	5	10	100	1000
Wheels	4	8	12	16	20	40	400	4000

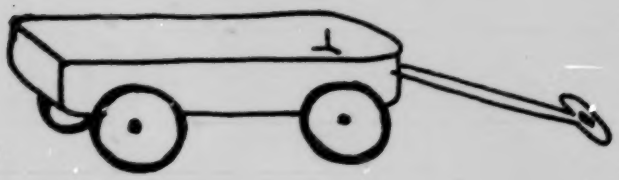
5BS1

Turns of Reel	3			
Feet	5			

1. The fish locator shows fish at 15 feet. How many turns of the handle should I make to lower the bait 15 feet?

2. About how deep are you fishing when it takes 12 turns of the handle to raise the bait to the surface?

6BM1



MAKE A TABLE WITH 5 MORE ENTRIES TO SHOW THE NUMBERS OF WHEELS NEEDED.

Wagons	1	2			
Wheels	4	8			

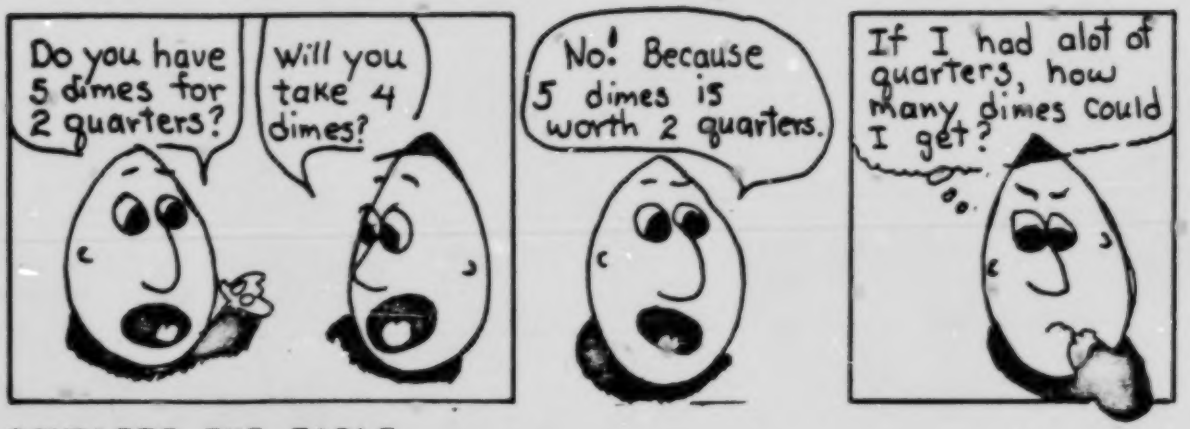
T 7BM1

Dimes	5	10	15	25	40	50
Quarters	2	4	6	10	16	20

T 8BC1

Trucks	1	10	3	5	4	6
Wheels	12	120	36	60	48	72

7BM1


Do you have 5 dimes for 2 quarters?
Will you take 4 dimes?
No! Because 5 dimes is worth 2 quarters.
If I had alot of quarters, how many dimes could I get?

COMPLETE THE TABLE.

Dimes	5	10		25		50
Quarters	2		6		16	

8BC1

COMPLETE THE TABLE.

Number of trucks	1	10			4	
Number of wheels	12		36	60		72

T 9BC1

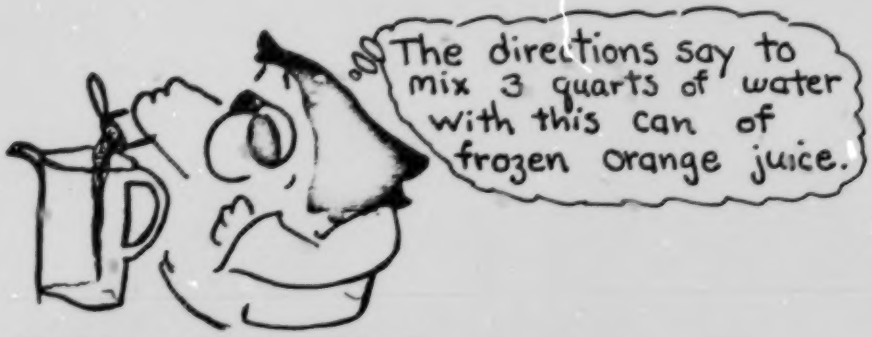
Cans of orange juice	1	2	4	10	7
Quarts of water	3	6	12	30	21

Three cans of frozen orange juice would be mixed with 9 quarts of water.

T 10BC1

Wagons	3	5	4	10	50	100
Wheels	12	20	16	40	200	400

9BC1

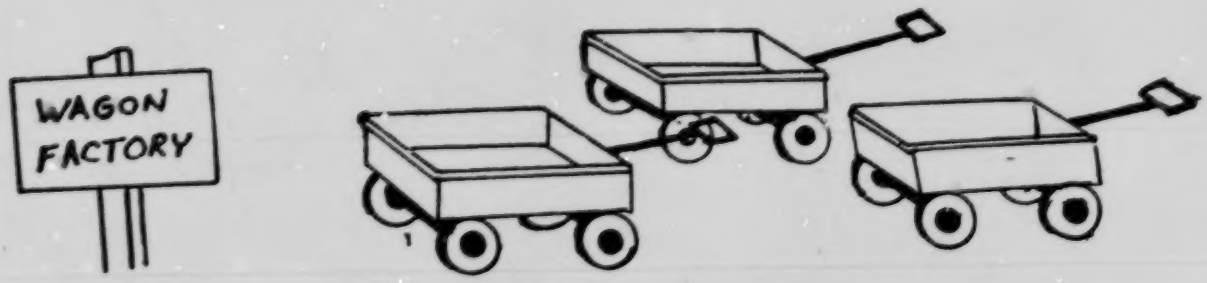


SHOW THE MIXTURES IN THE TABLE.

Cans of orange juice	1	2	4	10	7
Quarts of water	3				

How many cans of frozen orange juice should you buy to mix with 9 quarts of water?

10BC1



COMPLETE THE TABLE.

Wagons	3	5			50	
Wheels			16	40		400

T 11BM1

The table could have these entries:

Red	1	2	3	4	5	6	7
Yellow	3	6	9	12	15	18	21

T 12BS1

Baseball cards	2	4	6	8	10	20
Football cards	1	2	3	4	5	10

1. 3 football cards for 6 baseball cards.
2. 10 baseball cards for 5 football cards.
3. 10 football cards for 20 baseball cards.

11BM1

If you have red and yellow food coloring, you can make orange food coloring. 1 drop of red and 3 drops of yellow makes orange.

MAKE A TABLE WITH 5 MORE ENTRIES.

Red	1		
Yellow	3		

12BS1

Walt and Jim trade sport cards. Two baseball cards can be traded for 1 football card.

Baseball Cards	2			
Football Cards	1			

1. How many football cards will Walt get for 6 baseball cards?
2. How many baseball cards will Jim get for 5 football cards?
3. Walt trades 20 baseball cards. How many football cards will he get?

T 13BS1

Basketballs	1	2	3	4	6
Players	10	20	30	40	60

1. 30 players
2. 4 basketballs
3. 60 players

T 14BM1

Your table could include these entries:

Number of passengers	1	2	3	4	10
Number of kg baggage	20	40	60	80	200

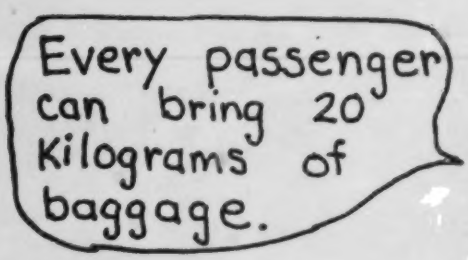
13BS1

Complete the table.

Basketballs	1	2	3		6
Players	10	20		40	

1. If we have 3 basketballs, how many players can we have?
2. If we have 40 players, how many basketballs do we need?
3. If we have 6 basketballs, how many players can we have?

14BM1



MAKE A TABLE WITH 5 MORE ENTRIES.

Number of passengers	1			
Number of kg baggage	20			

T 15BR1

1. 10 small wheels for 5 tricycles.
2. 7 large wheels for 7 tricycles.
3. 6 tricycles use 18 wheels.

T 16BM1

Sample answers.

Money	3¢	6¢	9¢	30¢	$3
Miles	1	2	3	10	100

15BR1

We counted tricycle wheels.
Use our table to solve the problems.

Tricycles	1	2	3	4	5	6	7
Small wheels	2	4	6	8	10	12	14
Large wheels	1	2	3	4	5	6	7
Total wheels	3	6	9	12	15	18	21

1. How many small wheels for 5 tricycles?

2. How many large wheels for 7 tricycles?

3. There are 18 wheels. How many tricycles are there if they have 18 wheels?

16BM1

MAKE A TABLE WITH 5 MORE ENTRIES TO SEE HOW MUCH MONEY YOU COULD MAKE IF YOU CHARGE 3¢ A MILE.

Money	3¢		
Miles	1		

T 17BS1

1. 35¢
2. 10
3. $1.00

T 18BS1

The table would help:

Bottles	1	2	3	4	10	20	30	40
Weight	8	16	24	32	80	160	240	320

1. 32 pounds.
2. 3 bottles.
3. 20 bottles.

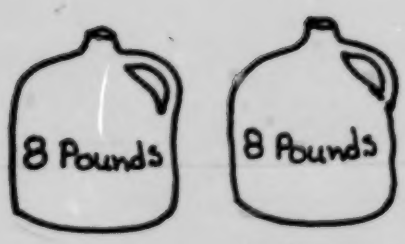
17BS1

COMPLETE THE TABLE.

Number of nickels	1	2	
Value of nickels	5¢	10¢	

1. Sue has 7 nickels. What is their value?
2. Steve has 50¢ worth of nickels. How many does he have?
3. Mary has 20 nickels. What is their value?

18BS1



COMPLETE THE TABLE.

Number of bottles	1	2	
Weight of bottles	8	16	

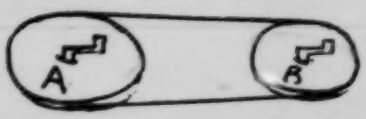
1. Mike brought 4 bottles of juice. What did they weigh?
2. Nel brought 24 pounds of juice. How many bottles did she bring?
3. The school needs 160 pounds of juice. How many bottles should they order?

29BS1

Bicycles	1	
Wheels	2	

1. Five bicycles are in a rack. How many wheels do they have?
2. Jack counted 8 wheels on the bicycles in his garage. How many bicycles were there?
3. There were 100 bicycles at the swimming pool. How many wheels did they have in all?
4. Jill said that 80 bicycle tires passed her house. How many bicycles was that?

30BC1



Pulley A turns 2 times for every 5 turns of pulley B.

COMPLETE THE TABLE.

Turns of A	2	4	6	8	10	20	30	40
Turns of B	5							

T 29BS1

This table would help:

Bicycles	1	2	4	8	10	20	80	100
Wheels	2	4	8	16	20	40	160	200

1. 10 wheels.
2. 4 bicycles.
3. 200 wheels.
4. 40 bicycles.

T 30BC1

Turns of A	2	4	6	8	10	20	30	40
Turns of B	5	10	15	20	25	50	75	100

27BR1

Table of Squares

N	N x N	N	N x N	N	N x N	N	N x N
1	1	6	36	11	121	16	256
2	4	7	49	12	144	17	289
3	9	8	64	13	169	18	324
4	16	9	81	14	196	19	361
5	25	10	100	15	225	20	400

The square of 13 is 169.

FIND THE SQUARES OF THESE NUMBERS.

1. 18
2. 14
3. 19
4. 16
5. 11
6. 15

28BB1

A cartoon commercial runs at 24 frames per second. An artist has to draw a cartoon for each frame.

Seconds	1	2			
Frames	24	48			

How many cartoon drawings does an artist have to make for a 15 second commercial?

T 27BR1

1. The square of 18 is 324.
2. The square of 14 is 196.
3. The square of 19 is 361.
4. The square of 16 is 256.
5. The square of 11 is 121.
6. The square of 15 is 225.

T 28BB1

360 drawings for the 15 second commercial.

One team thought: 240 for 10 seconds
120 for 5 seconds
360 for 15 seconds

25BS1

Number of super vans	1	
Number of wheels	20	

1. Three super vans passed the corner. How many tires was that?
2. Lisa counted 80 tires on the super vans at a gas station. How many vans were there?
3. Larry said 5 super vans were used to move a business. How many tires was that?

26BR1

AIRLINE MILEAGE CHART

	Chicago	Denver	Los Angeles	New York	San Francisco	Washington, D.C.
Chicago	[redacted]	901	1746	719	1847	617
Los Angeles	1746	849	[redacted]	2454	340	2286
New York	719	1617	2454	[redacted]	2566	200

How far is it between these cities:

1. Chicago to Denver?
2. Los Angeles to New York?
3. New York to Washington, D.C.?

T 25BS1

Super Vans	1	2	3	4	5	6	7
Wheels	20	40	60	80	100	120	140

1. 60
2. 4
3. 100

T 26BR1

1. 901 miles
2. 2454 miles
3. 200 miles

23BM1

1. Find a small pencil and make a table.
2. Place the pencil on the metric ruler and record the numbers in your table.
3. Move the pencil and record again.
4. Make at least 5 entries in your table.

Eraser end			
Point end			

24BC1

How much canned dog food is needed?

Dogs	1	2	10	20	40	100
Cans	½					

T 23BM1

Your table will depend on the particular pencil you use.

The numbers in the top row should always differ from the numbers in the bottom row by the same amount.

T 24BC1

Dogs	1	2	10	20	40	100
Cans	½	1	5	10	20	50

21BM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Number of people	2		
Number of dollars	3		

22BM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Number of people	1			
Number of bottle caps	50			

T 21BM1

Your table could include these entries:

Number of people	2	4	6	20	40	60	100
Number of dollars	3	6	9	30	60	90	150

T 22BM1

Your table could include these entries:

Number of people	1	2	3	10	20	100
Number of bottle caps	50	100	150	500	1000	5,000

19BR1

Yards		1	2	3	4	5	6	7
Feet	1	3	6	9	12	15	18	21
Inches	12	36	72	108	144	180	216	252

USE THE TABLE TO ANSWER THESE:

1. How many inches long is the yard stick?
2. A room is 12 feet wide. How many yards wide is the room?
3. Our medium size car is 18 feet long. How many yards long is the car?

20BM1

MAKE A TABLE WITH 5 MORE ENTRIES TO SHOW THE NUMBER OF WHEELS.

Number of bicycles	1	2	
Number of wheels	2	4	

T 19BR1

1. 36
2. 4
3. 6

T 20BM1

Your table could include these entries:

Bicycles	1	2	3	4	5	6	10	100	1000
Wheels	2	4	6	8	10	12	20	200	2000

T 31BB1

50cm of water.

T 32BM1

Your table could include these entries:

Centimeters	5	10	15	20	50	100	1000
Grams	2	4	6	8	20	40	400

31BB1

BUFFALO, NEW YORK HAS HAD 550 CENTIMETERS OF SNOW THIS WINTER.
My teacher said 11 centimeters of snow makes 1 centimeter of water.

How many centimeters of water would be produced from 550 centimeters of snow?

32BM1

Five centimeters of this wire weigh 2 grams.

MAKE A TABLE WITH 5 MORE ENTRIES.

Centimeters	5		
Grams	2		

T 1YC1

Large dogs	6	8	4	6	30
Small dogs	6	12	9	36	15
Pens	5	8	5	15	20

T 2YS1

This table would help you:

A Boxes	3	6	18	30
B Boxes	2	4	12	20

1. 18
2. 20
3. 18 inches

3 A Boxes would be 36 inches high.

If 2 B Boxes are 36 inches high, then each must be 18 inches.

1YC1

How many pens are needed?

Large dogs	6	8	4	6	
Small dogs	6	12	9		15
Pens				15	20

2YS1

You stack up two kinds of boxes. Three of the A boxes are the same height as 2 of the B boxes.

A Boxes	3	6			
B Boxes	2	4			

1. How many A boxes would be the same height as 12 B boxes?
2. How many B boxes would be the same height as 30 A boxes?
3. A boxes are 12 inches high. How high are the B boxes?

T 3YS1

... table should help:

Turns of A	2	20	12	64	40
Turns of B	5	50	30	160	100

1. 50 times
2. 12 times
3. 64 times
4. 40 times a minute

T 4YS1

Dollars	1	2	3	4	5
Quarters	4	8	12	16	20

1. Put in 2 dollars to get 8 quarters.
2. You get 16 quarters for 4 dollars.
3. You need to put in 5 dollars to get 20 quarters.

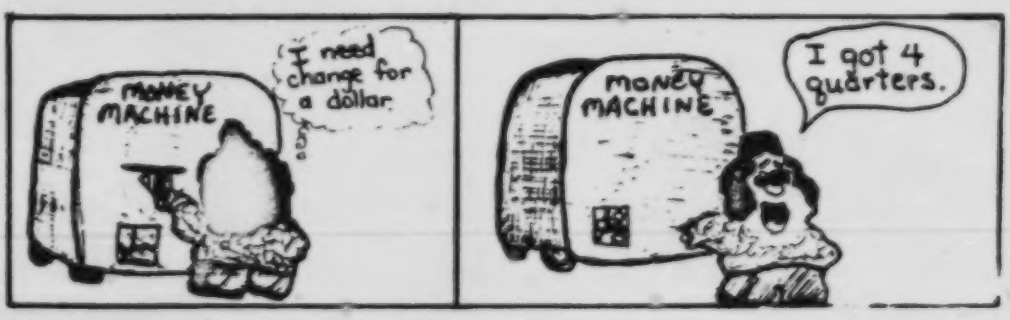
3YS1

MAKE A TABLE WITH 5 MORE ENTRIES.

Turns of A	2		
Turns of B	5		

1. When pulley A turns 20 times, how many times does pulley B turn?
2. When pulley B turns 30 times, how many times does pulley A turn?
3. A motor turns pulley B 160 times in a minute. When this motor is connected, how many times does pulley A turn in one minute?
4. How fast must I turn pulley A to get pulley B to turn 100 times a minute?

4YS1



Dollars	1			
Quarters	4			

1. How many dollars did you put in if the machine gave you 8 quarters?
2. How many quarters do I get for 4 dollars?
3. There are 20 quarters in a roll of quarters. How many dollars would I have to put in the machine to get the number of quarters in a roll?

T 5YM1

Your table could include these entries:

Boxes	1	2	3	10	20	100
Grams	330	660	990	3300	6600	33,000

T 6YB1

One student took 50 breaths in 3 minutes. For that student the table is:

Minutes	3	30	60
Breaths	50	500	1000

1000 breaths in 1 hour.

YM1

MAKE A TABLE.

Boxes	1	
Grams	330	

6YB1

Minutes	3			
Breaths				

T 7YC1

Dimes	5	10	15	25	50	100	150
Centimeters	9	18	27	45	90	180	270

T 8YM1

Your table could include these entries:

Dark	3	6	9	12	30	60	75
Light	4	8	12	16	40	80	100

7YC1

Five dimes side by side are 9 centimeters long.

COMPLETE THE TABLE.

Dimes	5	10		25	50		150
Centimeters	9		27			180	

8YM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Dark	3	
Light	4	

T 9YM1

Your table could include these entries:

Number of Comic Books	1	2	3	10	100	1000
Profit	2¢	4¢	6¢	20¢	$2	$20

T 10YM1

Your table could include these entries:

Players	5	10	15	20	25	30
Basketballs	2	4	6	8	10	12

9YM1

MAKE A TABLE WITH 5 MORE ENTRIES TO SHOW HOW MUCH YOU CAN EARN.

Comics			
Profit			

10YM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Players	5		
Basketballs	2		

T 11YR1

Number of dark pieces	2	4	6	8	10	20	40
Number of light pieces	3	6	9	12	15	30	60

1. You need 12 light pieces for 8 dark pieces.
2. You need 40 dark pieces for 60 light pieces.
3. You need 30 dark pieces for 40 light pieces.

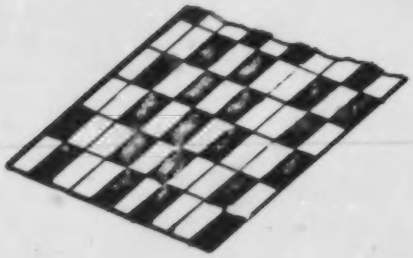
T 12YM1

Your table could include these entries:

Number of Blocks	7	14	21	3.5	10.5	17.5	1
Number of Minutes	2	4	6	1	3	5	.29

11YR1

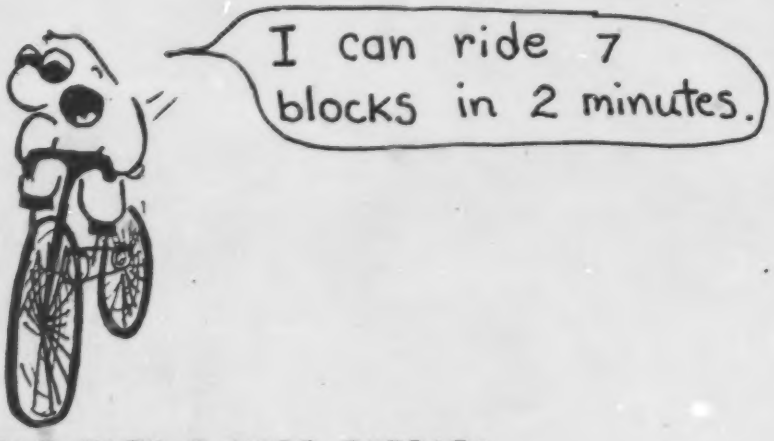
To make this design, you need 2 dark pieces for every 3 light pieces.



Number of Dark Pieces	2	4	6	8	10	20	40
Number of Light Pieces	3	6	9	12	15	30	60

1. How many light pieces are needed for 8 dark pieces?
2. How many dark pieces for 60 light pieces?
3. How many dark pieces for 45 light pieces?

12YM1



MAKE A TABLE WITH 5 MORE ENTRIES.

Number of blocks	7		
Number of minutes	2		

T 13YS1

This table helps:

Eggs	12	1	2	9	10	11	100	327
Cost	84¢	7¢	14¢	63¢	70¢	77¢	$7	$22.89

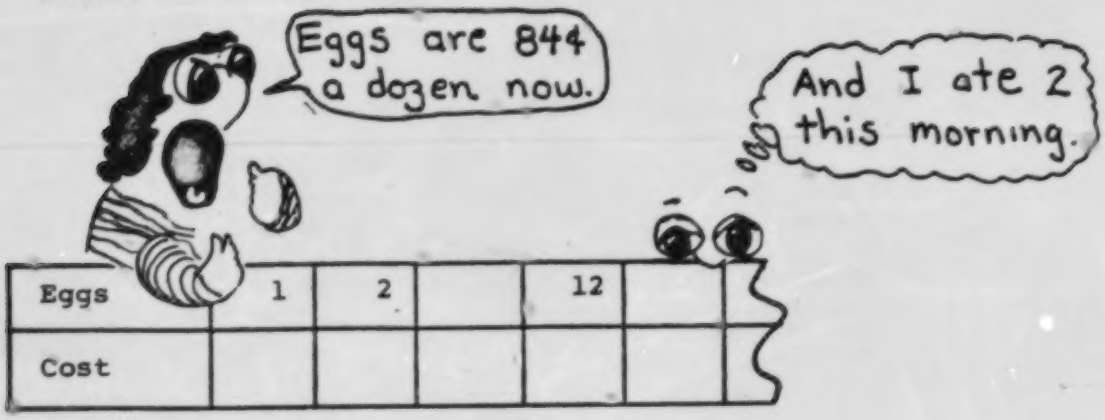
1. 14¢
2. 63¢
3. 77¢
4. $22.89

T 14YM1

Your table might have these entries:

Minutes	5	10	15	20	25	30
Dolls	36	72	108	144	180	216

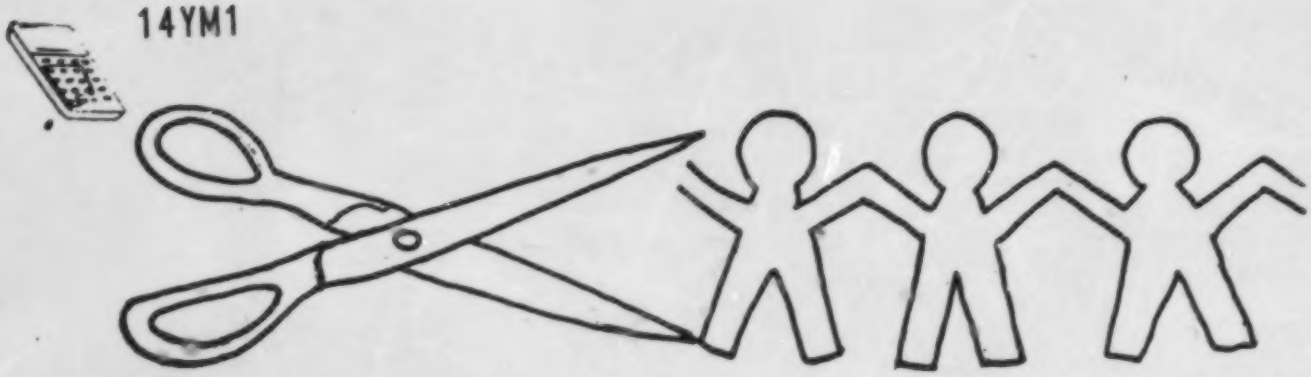
13YS1



Eggs	1	2		12		
Cost						

1. How much did the two eggs cost?
2. The Fox family ate 9 eggs this morning. How much did those eggs cost?
3. The Smith family ate 11 eggs. How much did those eggs cost?
4. A restaurant used 327 eggs one morning. How much did the eggs cost?

14YM1



I can cut out 36 dolls in 5 minutes.

MAKE A TABLE WITH 5 MORE ENTRIES.

Minutes	5			
Dolls	36			

T 15YS1

This table would help:

Cokes	1	2	3	4	20	24	240
Seconds	5	10	15	20	100	120	1200

1 coke takes 5 seconds.

240 cokes take 1200 seconds. That is the same as 20 minutes.

T 16YB1

Country western	3	6	12	15	21
Records	4	8	16	20	28

I have 21 country western records.

15YS1

1. How long for 1 coke?
2. If we got one for everyone in our room, how long would it take?
3. The coke man told me he puts 240 cans in there. How long would it take us to empty it?

16YB1

Country-western	3		
Records	4		

I have 28 records. How many of my records are country-western?

T 17YC1

Your answers to the questions will depend on the data you collected.

T 18YC1

Pennies	10	20	40	50	100	200
Cm	19	38	76	95	190	380

17YC1

GET SOME PAPER CLIPS. ASK SOMEONE TO TIME YOU BUILD A CHAIN OF 10 CLIPS. COLLECT YOUR DATA AND COMPLETE THE TABLE.

Clips	10	20	25	30
Seconds				

USE YOUR TABLE.

1. How long would it take you to build a chain of 40 clips?
2. What would be the time to chain a whole box of 500 paper clips?
3. You linked paper clips together for 3 minutes. About how long is your chain?

18YC1

Ten pennies laid side-by-side are 19 centimeters long.

COMPLETE THE TABLE.

Pennies	10	20		50		200
Centimeters	19		76		190	

T 19YC1

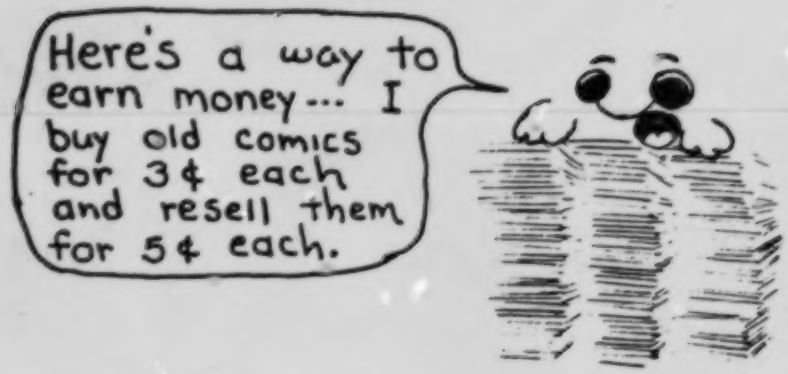
There is 2¢ profit on each comic book.

Comics	2	10	100	25	250	50	
Profit	4¢	20¢	$2	50¢	$5	$1	

T 20YR1

1. 5 yards.
2. 9 feet.
3. 24 inches.

13YC1



COMPLETE THE TABLE.

Comics	2	10	100			
Profit				50¢	$5	$1

20YR1

Yards		1	2	3	4	5	6	7
Feet	1	3	6	9	12	15	18	21
Inches	12	36	72	108	144	180	216	252

1. Joe's living room is 180 inches wide. How wide is the living room in yards?
2. A TV set is placed so that it is 108 inches from the chair. How many feet is it from the chair to the TV?
3. Jim purchased 2 feet of ribbon for art class. How many inches did he purchase?

T 21YB1

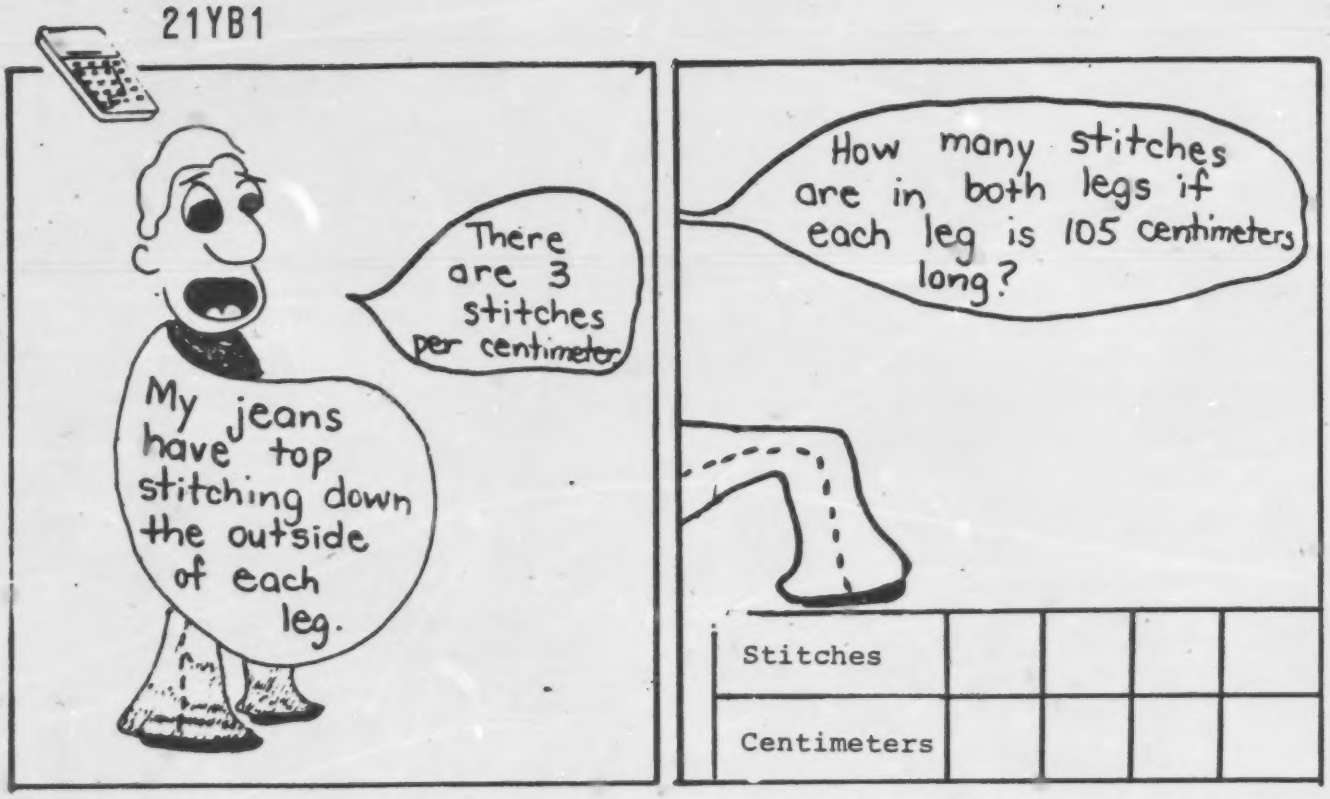
Stitches	3	15	300	315
Centimeters	1	5	100	105

Each leg has 315 stitches. Both legs have 630 stitches.

T 22YC1

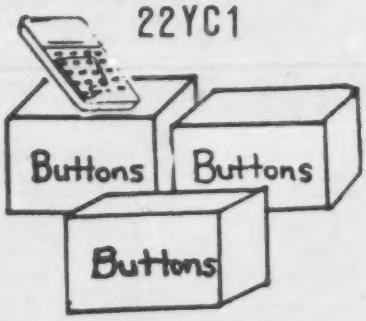
Shirts	10,000	15,250	12,243	9,999
Buttons	110,000	167,750	134,673	109,989

21YB1


My jeans have top stitching down the outside of each leg.
There are 3 stitches per centimeter.
How many stitches are in both legs if each leg is 105 centimeters long?

Stitches				
Centimeters				

22YC1



The Neato Shirt Company buys tons of buttons. For the Exec Model, they use 11 buttons on each shirt. COMPLETE THE TABLE TO SHOW THE BUTTONS NEEDED.

Shirts	10,000	15,250	12,243	9,999
Buttons				

T 23YC1

Cans	1	2	5	15	12	45
Cost	29¢	58¢	$1.45	$4.35	$3.48	$13.05

T 24YS1

Hours	1	10	20
Pay	$5.28	$52.80	$105.60

1. $168.96.
2. $211.20.
3. 38 hours.

23YC1

COMPLETE THE TABLE.

Cans	1	2	5	15		
Cost	29¢	58¢			$3.48	$13.05

24YS1

Mr. Taylor is a cutter for the Neato Shirt Company. He is paid $5.28 per hour.

COMPLETE THE TABLE TO HELP MR. TAYLOR FIGURE HIS PAY.

Hours	1			
Pay	$5.28			

1. One week Mr. Taylor worked 32 hours. What was his pay?
2. Another week Mr. Taylor worked 40 hours. What was his pay?
3. One week Mr. Taylor was paid $200.64. How many hours did he work?

T 25YM1

Your table could include these entries:

Liters	1	2	3	10	20	30
Kilometers	13	26	39	130	260	390

T 26YR1

1. 1847 miles.
2. 1857 miles San Francisco to Denver is 956 miles.
   Denver to Chicago is 901 miles.
   956 + 901 = 1857
3. 10 miles farther.

25YM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Liters	1		
Kilometers	13		

26YR1

AIRLINE MILEAGE CHART

	Chicago	Denver	Los Angeles	New York	San Francisco	Washington, D.C.
Chicago		901	1756	719	1847	612
Denver	901		849	1617	956	1488
San Francisco	1847	956	340	2566		2417

1. How far is it from San Francisco to Chicago?
2. Use the mileage chart to find the distance from San Francisco to Chicago if you stop in Denver.
3. How much farther is it to fly from San Francisco with a stop in Denver?

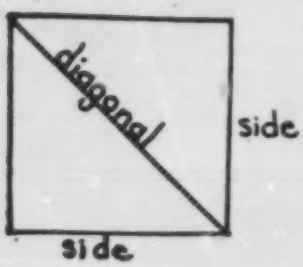
T 27YR1

1. 2.83cm
2. 5.66m
3. 5mm

T 28YR1

1. 42 swings
2. 100cm (or 1 meter)
3. 1800 (30 x 60)

27YR1



Length of side	2	3	4	5	
Length of diagonal	2.83	4.24	5.66	7.07	

1. How long is the diagonal of a square when its side is 2 cm long?
2. How long is the diagonal of a square when its side is 4 meters long?
3. How long is the side of a square when its diagonal is 7.07 mm?

28YR1

The number of times a pendulum swings per minute depends on its length.

Swings per minute	60	42	30
Length in centimeters	25	50	100

USE THE TABLE TO ANSWER:

1. How many swings would a 50 centimeter pendulum make in 1 minute?
2. How long is a pendulum that makes 30 swings a minute?
3. How many times would you expect a 100 centimeter pendulum to swing in 1 hour?

T 29YC1

Your answers will depend on the time it took you to build the 5-spool snake.

T 30YR1

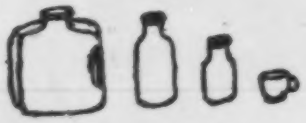
1. 1 quart.
2. 8 quarts.

29YC1

Find how long it takes you to put 5 spools on a piece of string. Use the time it took to make a 5-spool snake to estimate how long you would take to make the longer snakes. Do not build the longer snakes.

Number of spools	5	10	15	30	100
Time					

30YR1



Gallons			1	2	3	4	5
Quarts		1	4	8	12	16	20
Pints	1	2	8	16	24	32	40
Cups	2	4	16	32	48	64	80

USE THE TABLE TO ANSWER THESE QUESTIONS:

1. If you drink 4 cups of milk, how many quarts do you drink?
2. For a party you order 2 gallons of ice cream. How many quarts did you order?

T 31YM1

Your table could include these entries:

Dark	3	6	9	12	30	33	300
Light	5	10	15	20	50	55	500

T 32YM1

Your table could include these entries:

Revolutions of big wheel	3	6	9	1	.375	37.5
Revolutions of little wheel	8	16	24	2.67	1	100

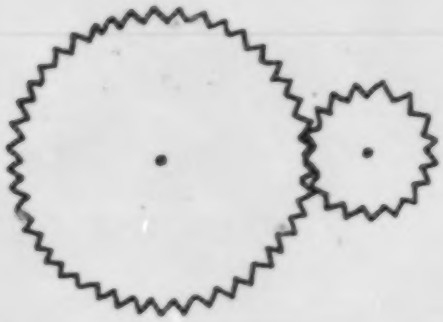
31YM1

MAKE A TABLE WITH 5 MORE ENTRIES.

Dark	3		
Light	5		

32YM1

Every time the big wheel turns 3 revolutions, the little one turns 8 revolutions.



MAKE A TABLE WITH 5 MORE ENTRIES.

Revolutions on big wheel	3			
Revolutions on little wheel	8			

T 33YC1

Green	4	8	12	20	24	16
White	1	2	3	5	6	4
Light green	5	10	15	25	30	20

T 34YC1

Cubic centimeters	60	120	180	300	600	3000
Heartbeats	1	2	3	5	10	50

1. 120 cubic centimeters of blood in 2 heartbeats.
2. 600 cubic centimeters of blood in 10 heartbeats.
3. 3000 cubic centimeters of blood in 50 heartbeats.

33YC1

COMPLETE THE TABLE.

Green	4	8	12	20		
White	1	2			6	
Light green	5	10	15			20

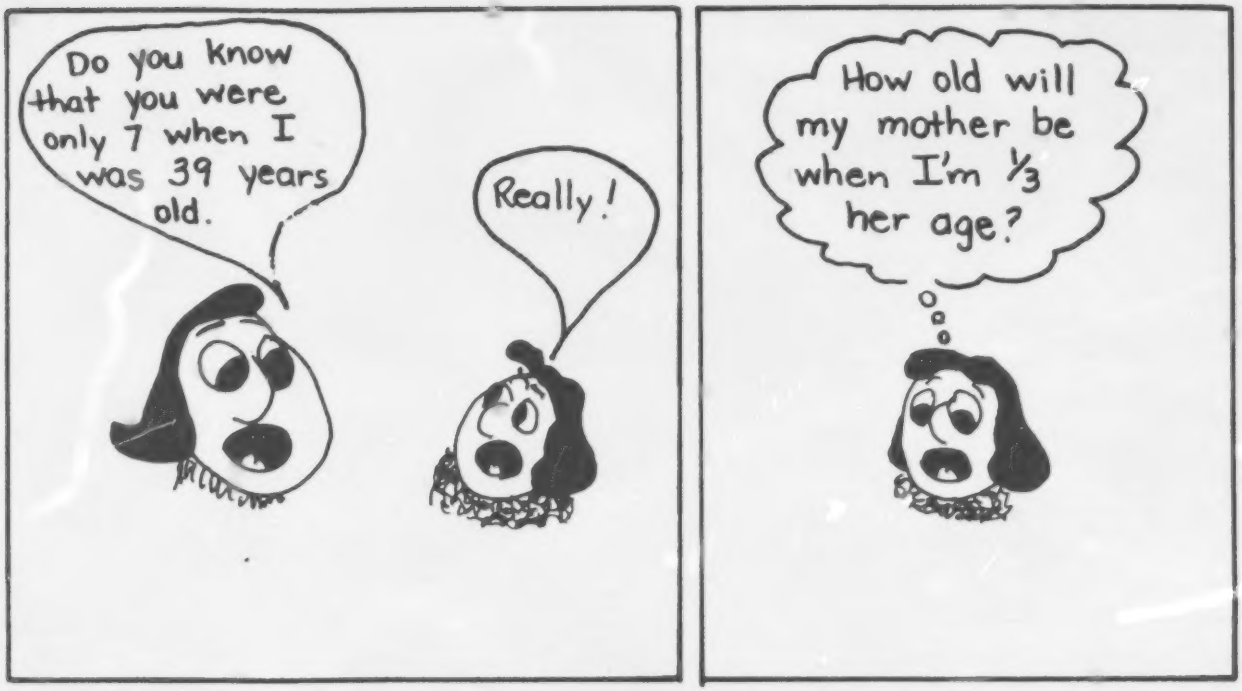
34YC1

Do you ever wonder how much blood your heart pumps? Normally, about 60 cubic centimeters of blood are pumped per heart beat.

Cubic Centimeters	60		
Heart Beats	1		

1. How many cubic centimeters of blood are pumped in two beats of a normal heart?
2. How many cubic centimeters of blood are pumped in 10 beats?
3. How many cubic centimeters of blood are pumped in 50 beats?

1WB1



2WB1

Someday to I'm going be a great basket ball player.
Saturday...
I made 20 baskets today. Each day I am going to make 10 more baskets than the day before.

On what day did he make 100 baskets?

Days	Sat.	Sun.	Mon.		
Baskets	20				

T 1WB1

Daughter	7	10	15	16
Mother	39	42	47	48

When I'm 16 my mother is 48 and 16 is $\frac{1}{3}$ of 48.

T 2WB1

Days	Sat.	Sun.	Mon.	Tues.	Wed.		Sat.	Sun.
Baskets	20	30	40	50	60		90	100

On Sunday he will make 100 baskets.

3WS1

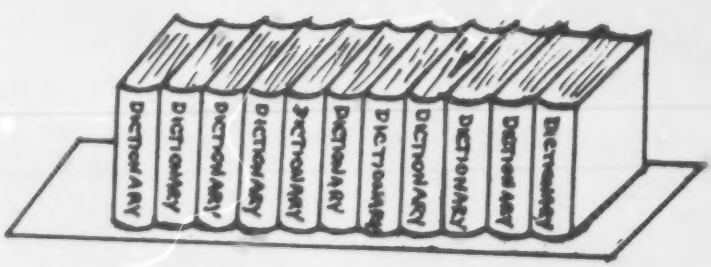
Hey Dad! Look what I found in the paper.
GIVE AWAY. German shepard Call 263-7124
A German shepard is expensive to feed. It takes 4 pounds of food each day.

Pounds				
Days				

1. How many pounds of dog food would you need for 5 days?
2. A 100 pound bag of dog food would last how many days?

4WM1

Each dictionary has 764 pages.



MAKE A TABLE WITH 5 MORE ENTRIES.

Number of dictionaries	1		
Number of pages	764		

T 3WS1

Pounds	4	8	12	16	20	100
Days	1	2	3	4	5	25

1. You need 20 pounds for 5 days.
2. A 100 pound bag will last 25 days.

T 4WM1

or Labi would include these entries

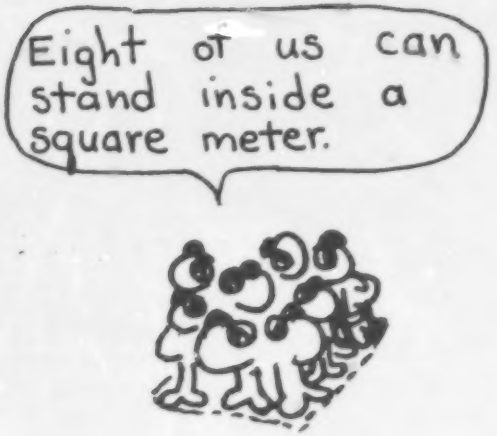
Dictionaries	1	2	3	4	5	6
Pgs	764	1528	2292	3056	3820	4584

6WR1

Nickels	1	2	3	4	5
Cents	5	10	15	20	25

Dimes	1	2	3	4	5
Cents	10	20	30	40	50

How many of our 8 coins are nickels?



5WS1

Number of students	8			
Number of square meters	1			

1. How many students could stand inside an area of 2 square meters?
2. How many students would fill an area of 10 square meters?
3. How many students could you expect to squeeze into an empty 60 square meter classroom?

T 5WS1

This table would help:

Number of students	8	16	80	480
Number of square meters	1	2	10	60

1. 16 students
2. 80 students
3. 480 students

T 6WR1

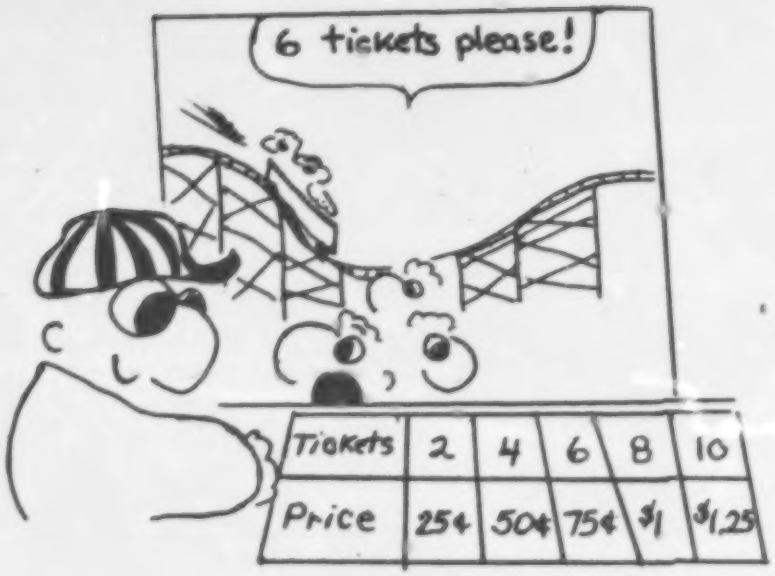
5 nickles

5 nickles are worth 25¢.

3 dimes are worth 30¢.

This makes 8 coins and 55¢ altogether.

8WR1



1. How many rides for 75¢?
2. How much for 12 tickets?
3. How many tickets can you buy for $4.25?

7WS1

Number of tosses	
Number of seconds	

At that rate how many times can we toss it back and forth in:

1. 30 seconds?
2. 1 minute?
3. 1½ minute?

How long would it take us to toss it back and forth:

4. 12 times?
5. 24 times?
6. 36 times?

T 7WS1

This table should help:

Number of tosses	3	9	18	27	12	24	36
Number of seconds	10	30	60	90	40	80	120

1. 9 tosses
2. 18 tosses
3. 27 tosses
4. 40 seconds
5. 80 seconds (That is 1 minute and 20 seconds)
6. 120 seconds (That is 2 minutes)

T 8WR1

1. 6 rides
2. $1.50
3. 34 tickets

9WR1

USE THE TABLE TO PLAY THE CUBE-TUBE GAME.

Cubes	1	2	3	4	5	6
Corners	8	16	24	32	40	48
Faces	6	12	18	24	30	36
Edges	12	24	36	48	60	72

FIND HOW MANY CUBES ARE IN THE TUBE FROM THESE CLUES.

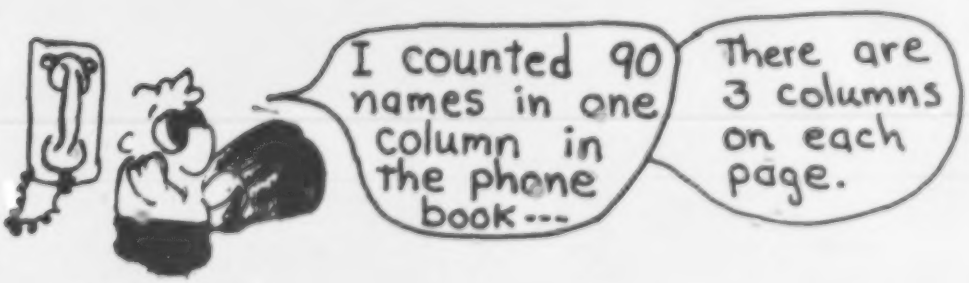
Game 1. There are between 40 and 50 edges in the tube.

Game 2. There are 10 more corners than faces.

Game 3. There are 4 more edges than corners.

Game 4. The number of corners plus the number of faces is 42.

10WC1



COMPLETE THE TABLE.

Columns	1	2		5		15
Names	90		270		900	

1. The telephone book has 114 pages. Estimate how many names are listed.

2. The name "Smith" fills 6 columns. Estimate how many Smiths are listed.

T 9WR1

Game 1. 4 cubes.

Game 2. 5 cubes.

Game 3. 1 cube.

Game 4. 3 cubes.

T 10WC1

Columns	1	2	3	5	10	15
Names	90	180	270	450	900	1350

. There are about 30,780 names in a 114-page telephone book.

. There are about 540 "Smiths" listed.

11WC1

FIND OUT HOW LONG THESE RECORDS PLAY.

Revolutions	45	90	180	67½	120	142½
Minutes	1	2				

12WS1

Number	1	2	
Postcards	11¢	22¢	
Letters	13¢	26¢	

1. How much does it cost to mail 3 letters and 2 postcards?
2. How much does it cost to mail 6 letters and 6 postcards?
3. I spent $1.22 and I wrote to 10 people. How many postcards and how many letters did I write?

T 11WC1

Revolutions	45	90	180	67½	120	142½
Minutes	1	2	4	1.5	2.67	3.17

T 12WS1

Number	1	2	3	4	5	6	7
Postcards	11¢	22¢	33¢	44¢	55¢	66¢	77¢
Letters	13¢	26¢	39¢	52¢	65¢	78¢	91¢

1. It costs 61¢ to mail 3 letters and 2 postcards.
2. It costs $1.44 to mail 6 letters and 6 postcards.
3. I wrote 4 postcards and 6 letters.

13WC1

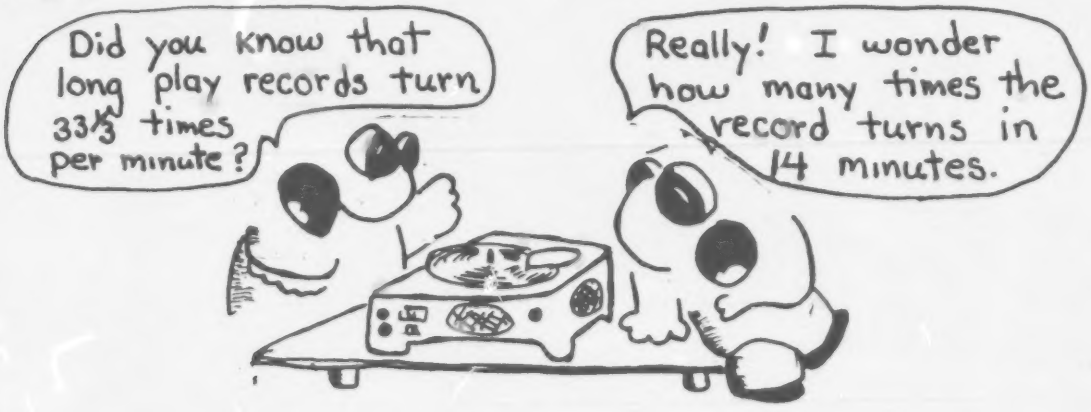
A light on a tall building blinks every 1.5 seconds.

COMPLETE THE TABLE.

Blinks	1	2			
Time	1.5 sec.	3 sec.	1 min.	1 hour	

Blinks			
Time	1 day	1 week	1 year

14WC1


Did you know that long play records turn 33⅓ times per minute?
Really! I wonder how many times the record turns in 14 minutes.

COMPETE THE TABLE TO FIND OUT.

Turns	$33\frac{1}{3}$	$66\frac{2}{3}$	100				
Minutes	1	2	3	4	6	10	14

T 13WC1

If you used 365 days for 1 year, you would get 10,512,000 blinks.

Blinks	1	2	20	1200
Time	1.5 sec.	3 sec.	1 min.	1 hr.

Blinks	28,800	201,600	10,483,200
Time	1 day	1 week	1 year

T 14WC1

Turns	$33\frac{1}{3}$	$66\frac{2}{3}$	100	$133\frac{1}{3}$	200	$333\frac{1}{3}$	$466\frac{2}{3}$
Minutes	1	2	3	4	6	10	14

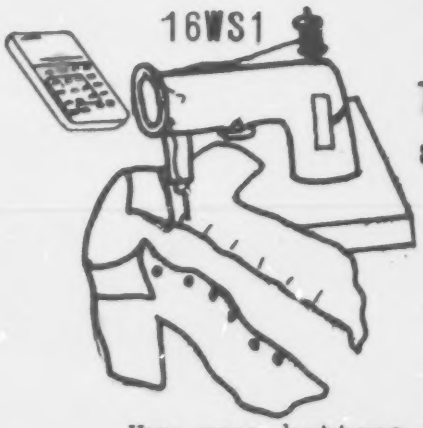
15WR1

Number	1	2	3	4	5	6
Weight of nickels in grams	5	10	15	20	25	30
Weight of quarters in grams	6	12	18	24	30	36

USE THE TABLE TO ANSWER THESE:

1. What is the weight of one dollar in nickels?
2. What is the weight of one dollar in quarters?
3. What is the weight of 3 coins whose value is 35¢?
4. What is the value of 7 coins that weigh 38 grams?

16WS1



The Neato Shirt Company makes a sport shirt which has six buttons.

Number of shirts	1		
Number of buttons	6		

How many buttons are needed when the production is:

1. 850 shirts?
2. 8,500 shirts?
3. 8,050 shirts?

How many shirts can be made using:

4. 4,548 buttons?
5. 7,404 buttons?

T 15WR1

1. 20 nickels weigh 100 grams
2. 4 quarters weigh 24 grams.
3. 1 quarter and 2 nickels weigh 16 grams in all.

T 16WS1

This table would help:

Shirts	1	100	1000	50	500	50,000
Buttons	6	600	6000	300	3000	300,000

1. 5100 buttons.
2. 51,000 buttons.
3. 48,300 buttons.
4. 758 shirts.
5. 1234 shirts.

17 WB1

Bill is paid 75¢ per hour for babysitting. After midnight he gets $1.00 per hour. How much should he be paid if he babysat from 8:00 in the evening until 2:00 in the morning?

Hours before midnight	1			
Pay	.75			

Hours after midnight	1			
Pay	1.00			

18WS1

A field goal in basketball counts 2 points. A free throw counts 1 point.
COMPLETE THE TABLE.

Field goals	18	26	26	17	22
Free throws	14	9	18	20	26
Points	50				

1. The Wildcats made 10 field goals and 8 free throws in the first half of the game. They made 7 field goals and 12 free throws in the second half. How many points did they score in the game?
2. The Cougars scored 70 points. They made 26 field goals. How many free throws did they make?

T 17WB1

$5.00

Hours before midnight	1	2	3	4	
Pay	.75	1.50	2.25	3.00	

Hours after midnight	1	2	
Pay	1.00	2.00	

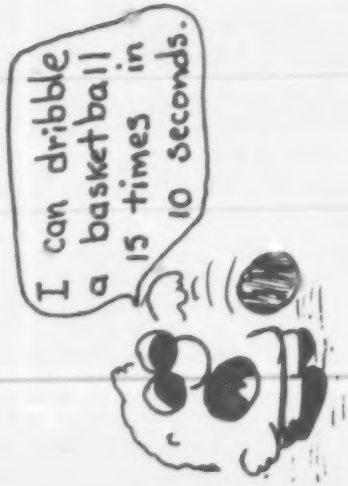
Bill worked 4 hours before midnight and 2 hours after.

T 18WS1

Field goals	18	26	26	17	22
Free throws	14	9	18	20	26
Points	50	61	70	54	70

1. 54 points.
2. 18 free throws.

19WS1



COMPLETE THE TABLE.

Number of dribbles	15				60
Number of seconds	10	30	40		

How many times can he dribble the basketball in:

1. 1 minute?
2. 1½ minutes?
3. 40 seconds?

How long does it take to dribble the ball:

4. 3 times?
5. 6 times?
6. 9 times?

20WR1

Number	1	2	3	4	5	6
Weight of nickels in grams	5	10	15	20	25	30
Weight of quarters in grams	6	12	18	24	30	36

USE THE TABLE TO ANSWER THESE:

1. Which is worth more: 60 grams in nickels or 60 grams in quarters?
2. How many quarters would it take to balance the weight of 10 nickels?
3. How much more does 75 cents worth of nickels weigh than 75 cents worth of quarters?

T 19WS1

Number of Dribbles	15	45	60	90	135	3	6	9
Number of Seconds	10	30	40	60	90	2	4	6

1. 90 dribbles
2. 135 dribbles
3. 60 dribbles
4. 2 seconds
5. 4 seconds
6. 6 seconds

T 20WR1

1. Quarters. 60 grams is the weight of 10 quarters. They are worth $2.50.

   60 grams is the weight of 12 nickels. They are worth 60¢.

2. Approx. 8. 10 nickels weight 50 grams.
   8 quarters weigh 48 grams.

3. 57 grams. 75¢ is 15 nickels. They weigh 75g.
   75¢ is 3 quarters. They weigh 18g.
   75 - 18 = 57

21WS1

This screw moves into the wood 1 centimeter for each 5 turns of the screw.

COMPLETE THE TABLE.

Turns	5	10	20	35	50	60
Distance	1					

1. I need to put the screw into 3 centimeters of wood. How many times do I have to turn the screw?
2. A screw that is 4 centimeters long must be turned into a wooden block. How many times must I turn the screw?
3. I turned a screw 25 turns to put it in the wood. How long is the screw?

22WR1

Weight of Common Solids in Grams

Volume in cubic centimeters	1	2	3	4	5	10
Water	1	2	3	4	5	10
Iron	7.9	15.8	23.7	31.6	39.5	79
Gold	19.3	38.6	57.9	72.2	96.5	193

1. What is the weight of 1 cubic centimeter of iron?
2. What is the weight of 6 cubic centimeters of water?
3. A block of gold weighs 60 grams. Estimate the volume of the block in cubic centimeters.

T 21WS1

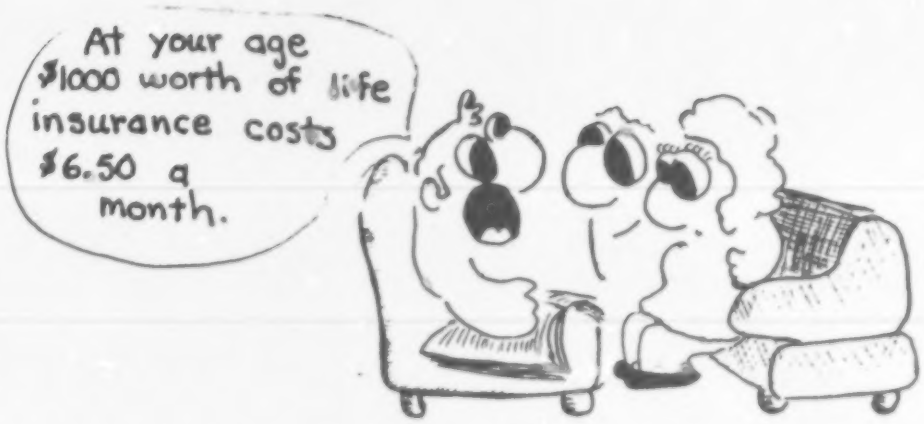
Turns	5	10	20	35	50	60
Distance	1	2	4	7	10	12

1. 15 turns
2. 20 turns
3. 5 cm

T 22WR1

1. 7.9 grams.
2. 6 grams.
3. A little more than 3 cubic centimeters.

23WC1



How much will these amounts of life insurance cost?

Amount of insurance	$1000	$2000	$10,000	$[illegible],000	$25,000
Monthly cost	$6.50				

24WB1

A Ferris wheel takes a group of 24 people every 5 minutes. How long will you have to wait in line if there are 85 people in front of you?

T 23WC1

Amount of insurance	$1000	$2000	$10,000	$15,000	$25,000
Monthly cost	$ 6.50	$13.00	$65.00	$97.50	$162.50

T 24WB1

This table should help:

Number of people ahead of you	0-23	24-47	48-71	72-95
Number of minutes you must wait	0	5	10	15

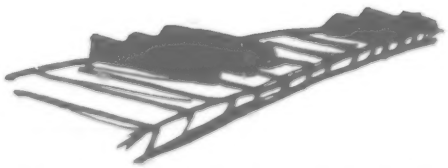
You must wait at least 15 minutes.

25WB1

The average growth of the diameter of a red wood tree is 5 millimeters a year. How thick would a tree be that is 100 years old?

← Diameter ⟶

26WS1



PRACTICE TIME	
Mon, Tues, wed, Thur, Fri	½ hour each day
Sat	1½ hour

MAKE A TABLE TO SHOW THE PRACTICE TIME.

Number of weeks	1	2	3	50	100
Hours of practice				200	

1. Bill has followed the practice schedule for a year (52 weeks). How many hours has he practiced?
2. Barb has followed the practice schedule for five years. How many hours has she practiced?
3. Brad claims he followed the practice schedule and practiced 48 hours to get ready for his recital. How many weeks did he take?

T 25WB1

This table should help:

Age in years	1	2	3	10	100
Diameter in millimeters	5	10	15	50	500

The 100 year old tree is 500 millimeters across.
That is 50 centimeters or half a meter.

T 26WS1

Number of weeks	1	2	3	50	100
Hours of practice	4	8	12	200	400

1. 208 hours
2. 1040 hours
3. 12 weeks

27WR1

At 8:00 the thermometer reads +10° and the wind is blowing 15 m.p.h.

WIND CHILL TABLE

Readings	When the wind blows at the m.p.h. below, it reduces temperature to:								
↓	Calm	5	10	15	20	25	30	35	40
+20	20	16	4	-5	-10	-15	-18	-20	-21
+10	10	0	-9	-18	-25	-29	-33	-35	-37
0	0	-5	-21	-36	-39	-44	-48	-49	-53
-10	-10	-15	-33	-45	-53	-59	-63	-67	-69
-20	-20	-25	-46	-58	-67	-74	-79	-82	-85

1. What is the wind chill temperature?
2. By 10:00 the wind increases to 20 m.p.h. How much does the wind chill temperature drop?
3. By 11:00 the wind decreases to 10 m.p.h. How much does the wind chill temperature increase?

28WB1

Our school can get calculators for $14.00 each. They come boxed 12 calculators per carton.
How many cartons of calculators could we buy for $840.00?
CALCULATORS

T 27WR1

1. -18°
2. 7° drop (the wind chill temperature is -25°)
3. 16° rise (the wind chill temperature is -9°)

T 28WB1

Each carton of 12 calculators costs $168.

12 x 14 = 168

Cartons	1	10	5
Cost	168	1680	840

$840 will buy 5 cartons of calculators.

29WR1

Gallons			1	2	3	4	5
Quarts		1	4	8	12	16	20
Pints	1	2	8	16	24	32	40
Cups	2	4	16	32	48	64	80

1. For a punch recipe you mix 5 quarts of fruit juice with 7 quarts of ginger ale. How many gallons of punch do you make?
2. To paint a house you need 15 gallons of paint. You already have 8 quarts. How many more gallons do you need to buy?

30WR1

Table of Square Roots

N	$\sqrt{N}$	N	$\sqrt{N}$	N	$\sqrt{N}$	N	$\sqrt{N}$
1	1.00	6	2.45	11	3.32	16	4.00
2	1.41	7	2.65	12	3.46	17	4.12
3	1.73	8	2.83	13	3.61	18	4.24
4	2.00	9	3.00	14	3.74	19	4.36
5	2.24	10	3.16	15	3.87	20	4.47

The square root of 8 is 2.83.
USE THE TABLE TO FIND THESE SQUARE ROOTS:

1. 10
2. 14
3. 9
4. 20
5. 16
6. 5

T 29WR1

1. 3 gallons (12 quarts).
2. 13 gallons (you already have 2 gallons).

T 30WR1

1. $\sqrt{10} = 3.16$
2. $\sqrt{14} = 3.74$
3. $\sqrt{9} = 3$
4. $\sqrt{20} = 4.47$
5. $\sqrt{16} = 4$
6. $\sqrt{5} = 2.24$

31WC1

FIND THE ALTITUDES FOR THESE GROUND DISTANCES.

Ground distance	700 meters	100 meters	200 meters	350 meters	650 meters
Altitude	403.9 m	57.7 m			

32WS1

When you ride a Ferris wheel that's 40 feet high, you travel 125 feet in a circle for each revolution of the wheel.

Distance	125				
Revolutions	1	8			

1. How many feet do you travel around in 8 revolutions of the Ferris wheel?
2. About how many revolutions would you have to take before you traveled 5,000 feet?
3. If a 35¢ ticket allows you to ride the Ferris wheel for 8 revolutions, how much would you have to pay to travel a total of 10,000 feet?

T 31WC1

Ground distance	700m	100m	200m	350m	650m
Altitude	403.9m	57.7m	115.4m	202m	375m

T 32WS1

This table would help you:

Distance	125	1000	5000	10,000
Revolutions	1	8	40	80

1. 100 feet
2. 40 revolutions
3. $3.50

Revolutions	8	80
Cost	35¢	350¢

33WS1

In the game of Sergeant-Major, the scores of some players are UP and others are DOWN. As many points are UP as DOWN. The DOWN scores are circled. COMPLETE THE TABLE.

Lynn	3	(1)		5	2	3
Kim	(2)	2	(3)		3	
Carol	(1)	(1)	4	(6)		(3)

1. What is Lynn's total score?
2. What is Kim's total score?
3. What is Carol's total score?

34WS1

Slices	2		
Inches	1		

1. How many slices of bread in a 12-inch loaf?
2. How many slices of bread in a 2-foot loaf?
3. The longest loaf of bread ever baked was 90 feet in length. How many slices of bread are in a 90-foot loaf?

T 33WS1

Lynn	3	①	①	5	2	3
Kim	②	2	③	1	3	0
Carol	①	①	4	⑥	⑤	③

1. Lynn's total is 11.
2. Kim's total is 1.
3. Carol's total is (12).

T 34WS1

Slices	2	4	6	8	10	20
Inches	1	2	3	4	5	10

35WR1

Weight of Common Solids in Grams

Volume in cubic centimeters	1	2	3	4	5	10
Pine Wood	.5	1	1.5	2	2.5	5
Water	1	2	3	4	5	10
Iron	7.9	15.8	23.7	31.6	39.5	79
Lead	11.3	22.6	33.9	45.2	56.5	113

1. Which weighs more, 10 cubic centimeters of iron or 10 cubic centimeters of lead?
2. Which weighs more, 5 cubic centimeters of lead or 10 cubic centimeters of iron?
3. How many cubic centimeters of wood weighs the same as 10 cubic centimeters of water?

36WR1

A 727 jet takes off at a 30° angle of climb.

This table shows the altitude and the ground distance from the take off point.

Altitude	57.7 m	115.4 m	173.1 m	230.8 m	346.2 m
Ground distance	100 m	200 m	300 m	400 m	600 m

What is the altitude when the plane has traveled these ground distances:

1. 300 meters? 2. 600 meters? 3. 800 meters?

T 35WR1

1. Lead. 10 cubic centimeters of iron weigh 70 grams.
   10 cubic centimeters of lead weigh 113 grams.
2. Iron. 5 cubic centimeters of lead weigh 56.5g.
   10 cubic centimeters of iron weigh 70g.
3. 20. 10 cubic centimeters of water weigh 10g.
   20 cubic centimeters of pine wood weigh 10g.

T 36WR1

1. 173.1 meters.
2. 346.2 meters.
3. 461.6 meters.

T 1RM1

Your table could include these entries:

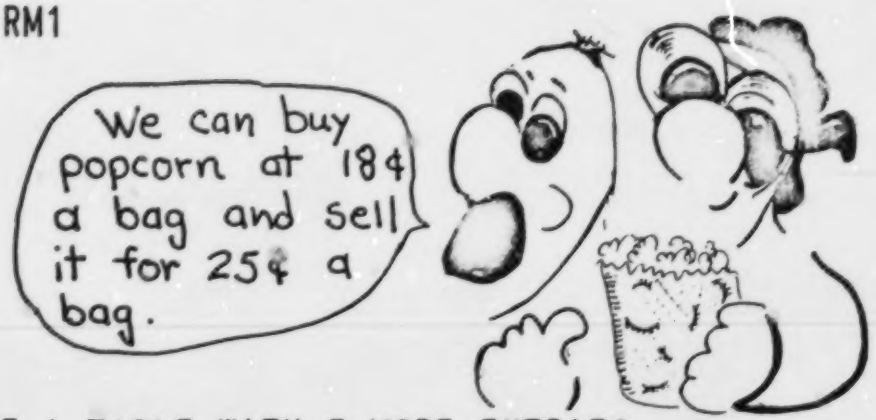
Bags	1	2	3	4	10	100	1000
Cost	18¢	36¢	54¢	72¢	$1.80	$18	$180
Income	25¢	50¢	75¢	$1.00	$2.50	$25	$250
Profit	7¢	14¢	21¢	28¢	70¢	$ 7	$ 70

T 2RB1

Miles	1½	3	9	45
Hours	1	2	6	30

He can paint 45 miles of dotted lines in 30 hours.

1RM1



MAKE A TABLE WITH 5 MORE ENTRIES.

Bags	1	
Cost	18¢	
Income	25¢	
Profit	7¢	

2RB1

My dad works 6 hours a day painting these center dotted lines on highways
The machine he uses can paint about a mile and a half an hour

How many miles can he paint in a 5-day week (30 hrs.)?

T 3RR1

Game 1. 4 cubes
Game 2. 3 cubes
Game 3. 10 cubes
Game 4. 2 cubes

T 4RR1

1. 4°
2. -45°
3. -5°
4. -59°

3RR1

USE THE TABLE TO PLAY THE CUBE-TUBE GAME.

Number of cubes	1	2	3	4	5	6
Number of corners	8	16	24	32	40	48
Number of faces	6	12	18	24	30	36
Number of edges	12	24	36	48	60	72

SOME CUBES ARE IN A TUBE. FIND HOW MANY CUBES ARE IN THE TUBE FROM THESE CLUES.

Game 1. There are between 30 and 40 corners in the tube.

Game 2. There are between 10 and 40 corners, between 10 and 20 faces, and between 30 and 50 edges.

Game 3. There are 60 faces in the tube.

Game 4. There are more than 10 faces and less than 30 edges in the tube.

4RR1

WIND CHILL TABLE

Readings ↓	When the wind blows at the m.p.h. below, it reduces temperature to: Calm	5	10	15	20	25	30	35	40
+20	20	16	4	-5	-10	-15	-18	-20	-21
+10	10	0	-9	-18	-25	-29	-33	-35	-37
0	0	-5	-21	-36	-39	-44	-48	-49	-53
-10	-10	-15	-33	-45	-53	-59	-63	-67	-69

The wind chill temperature is -25° when it's +10° and the wind is blowing 20 miles per hour.

FIND THESE WIND CHILL TEMPERATURES.

1. Temperature is +20° with a wind of 10 miles per hour.
2. Temperature is -10° with a wind of 15 miles per hour.
3. Temperature is 0° with a wind of 5 miles per hour.
4. Temperature is -10° with a wind of 25 miles per hour.

T 5RS1

This table should help.

Miles per hour	15	30	45	60
Feet per second	22	44	66	88

No. of sec.	1	2	5	13.6
No. of ft.	22	44	110	300

1. 110 feet
2. 13.6 seconds
3. 1 second
4. 60 mph.

T 6RB1

Miles	60	120	240
Gallons	1	2	4

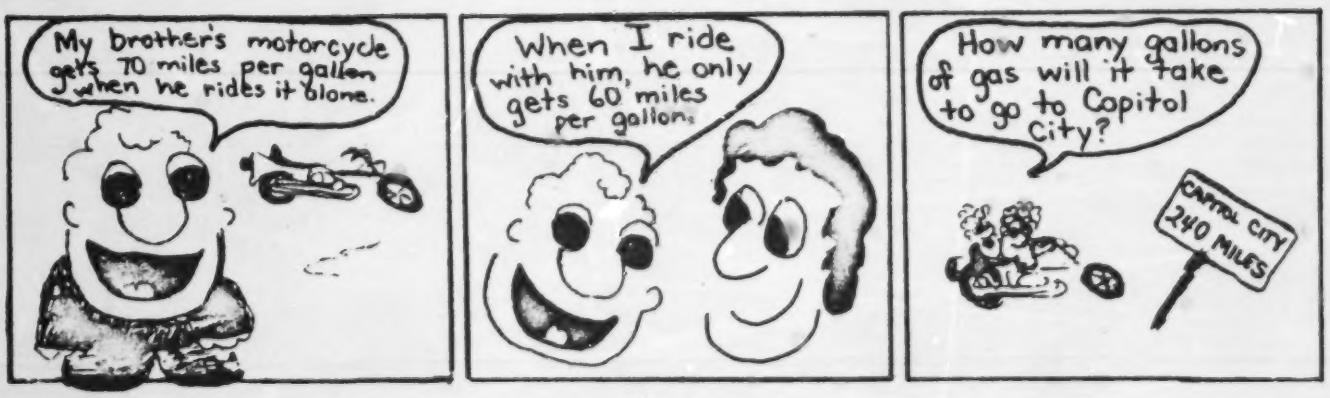
It will take 4 gallons of gas.

5RS1

At 15 miles an hour, a car travels 22 feet in one second.

1. How many feet does a car going 15 miles an hour travel in 5 seconds?
2. How long does it take a car going 15 miles an hour to travel 300 feet?
3. How long does it take a car going 30 miles an hour to travel 44 feet?
4. If a car travels 88 feet in one second, how fast is the car traveling in miles per hour?

6RB1


My brother's motorcycle gets 70 miles per gallon when he rides it alone.
When I ride with him, he only gets 60 miles per gallon.
How many gallons of gas will it take to go to Capitol City?
CAPITOL CITY 240 MILES

Miles			
Gallons			

T 7RB1

Words	340	3400	3740	4080
Minutes	1	10	11	12

It will take about 12 minutes.

T 8RB1

MEDIUM--35 minutes per pound.

TABLE FOR MEDIUM

Time	35	70	105	210	245
Pounds	1	2	3	6	7

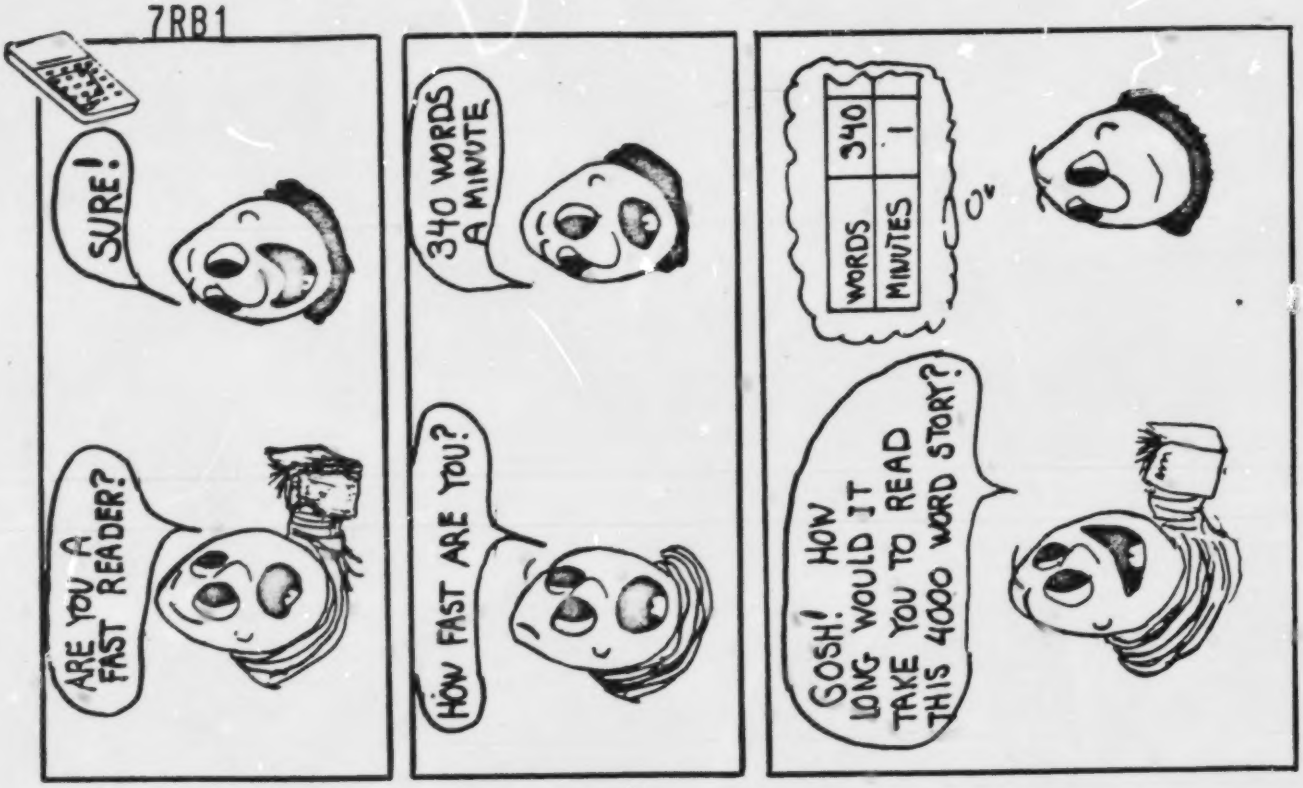
245 minutes = 4 hours and 5 minutes.

Start the roast at 2:55 to eat at 7:00.

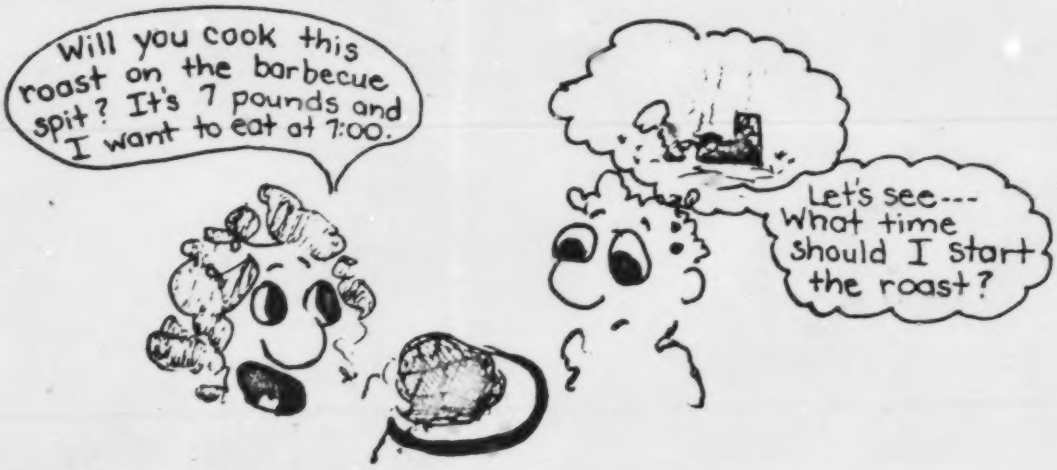
Start the roast 70 minutes later for RARE. Start at 4:05 for RARE.

Start the roast 35 minutes earlier for WELL DONE. Start at 2:20 for WELL DONE.

7RB1


SURE!
ARE YOU A FAST READER?
340 WORDS A MINUTE
HOW FAST ARE YOU?
WORDS 340
MINUTES 1
GOSH! HOW LONG WOULD IT TAKE YOU TO READ THIS 4000 WORD STORY?

8RB1


Will you cook this roast on the barbecue spit? It's 7 pounds and I want to eat at 7:00.
Let's see--- What time should I start the roast?

Timetable for spit-barbecued beef roast		
Rare	Medium	Well
25 minutes per pound	35 minutes per pound	40 minutes per pound

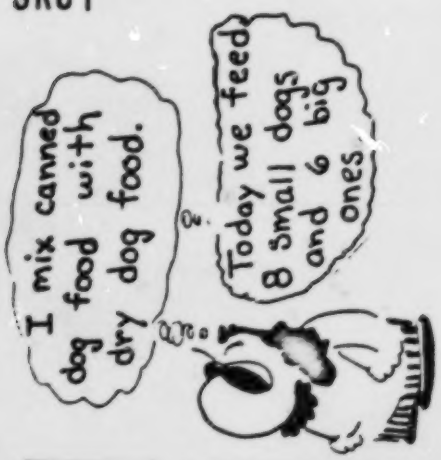
T 9RC1

Small Dogs	8	2	4	6	8
Big Dogs	6	3	3	5	4
Cans	10	4	5	8	8
Cups	34	13	17	27	28

T 10RR1

1. 3.4 hours (.6 + .6 + 1.9 + .3)
2. $40.80 (12 x 3.4)
3. $73.80 (40.80 + 16.50 + 16.50)

9RC1



DAILY FEED MIXES	
Small dogs ½ can + 2 cups dry	Large dogs 1 can + 3 cups dry

COMPLETE THE TABLE.

Small Dogs	8	2	4	6	8		
Big Dogs	6	3	3	5	4		
Cans	10	4					
Cups	34	13					

10RR1

Joe's Fix-it Shop Time Estimates	
Job	Hours
Replace gizmo	.6
Repair rutchle	2.3
Paint rutchle	.8
Replace zimp	.7
Repair zimp	1.9
Paint zimp	.3

Mr. Brash had to replace 2 gizmos and repair and paint a zimp.

1. How long did Joe's Fix-it Shop estimate it would take?
2. Joe's charges $12 per hour. What did it cost Mr. Brash?
3. A new gizmo costs $16.50. What was Mr. Brash's total bill?

T 11RC1

Apples	3	6
Buying	10	20

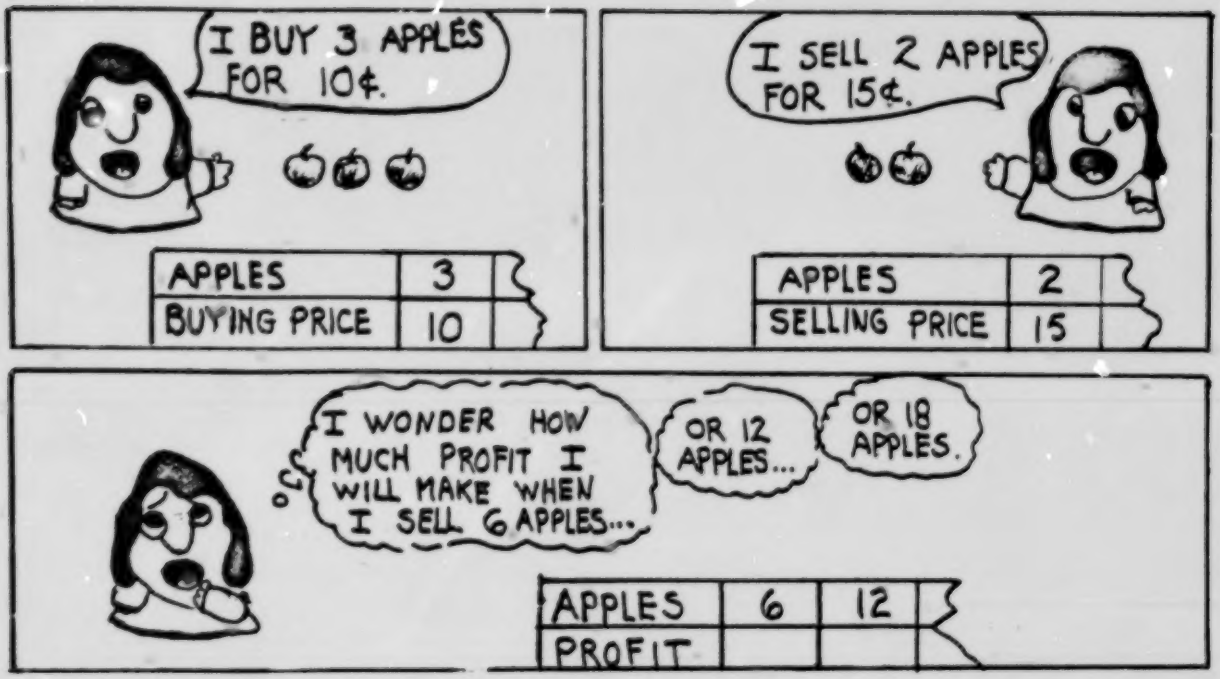
Apples	2	6
Selling	15	45

Apples	6	12	18
Profit	25	50	75

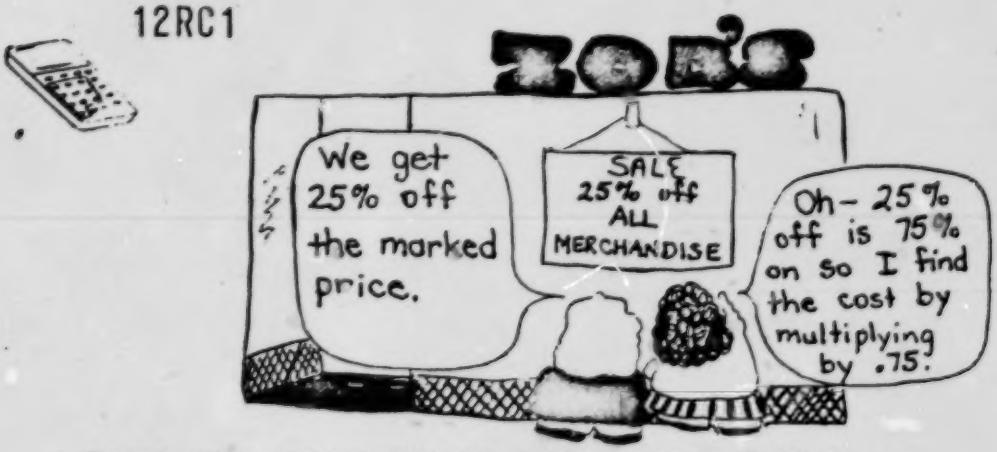
T 12RC1

Original Price	10.00	1.00	12.50	1.95	22.50	17.75
Sale price	7.50	.75	9.38	1.46	16.88	13.31

11RC1


I BUY 3 APPLES FOR 10¢.
APPLES 3
BUYING PRICE 10
I SELL 2 APPLES FOR 15¢.
APPLES 2
SELLING PRICE 15
I WONDER HOW MUCH PROFIT I WILL MAKE WHEN I SELL 6 APPLES...
OR 12 APPLES...
OR 18 APPLES.
APPLES 6 12
PROFIT

12RC1



FIND THE SALE PRICE FOR THESE ITEMS.

Original price	10.00	1.00	12.50	1.95	22.50	17.75
Sale price	7.50	.75				

T 13RM1

Your table could have these entries:

Length	6	1.2	8	12	24	240	80
Width	4	20	3	2	1	.1	.3

The length times width must equal 24.

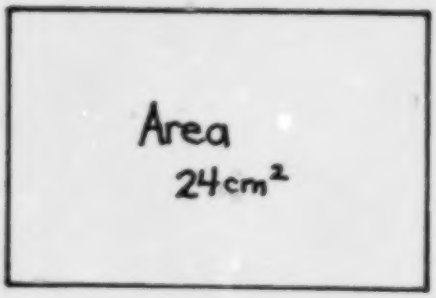
T 14RB1

Cans	25	100	1000	1500	1667
Pounds	1	4	40	60	66.67
Earnings	.15	.60	6.00	9.00	10.00

1. 100 cans are worth 60 cents.
2. You would need to collect 1667 cans.

13RM1

One way to get a 24 square centimeter rectangle is to make the length 6 cm and the width 4 cm.



MAKE A TABLE FOR OTHER 24 SQUARE CENTIMETER RECTANGLES.

Length	6			
Width	4			

14RB1

Here's a way to earn some money.
What are you doing with empty aluminum cans?
I'm going to sell them for 15¢ a pound.
That's a good idea! How many cans does it take to make a pound?
Only 25 cans!

1. How much are 100 empty aluminum cans worth?
2. How many empty aluminum cans would you need to collect to earn $10.00?

T 15RB1

3,000,000 buttons.

One team used this table:

Number of buttons	3	3000	3,000,000
Weight in grams	1	1000	1,000,000
		1kg	1000kg

T 16RB1

Your answers will depend on the information you gather.

16RB1

WORK WITH A PARTNER AND BUILD SOME PAPER CLIP CHAINS. KEEP THE TIME AND RECORD THE LENGTHS IN THE TABLE.

Time	15 sec.	30 sec.	60 sec.	
Chain				

Estimate how long it would take to make a chain which is 5 meters long.

15RB1

How many buttons are in a metric ton?

A metric ton is 1000 kg.
Three buttons weigh 1 g.

T 17RB1

The desk is 81cm wide.

Notice that the differences are always 81.

1. 9000 grams.
2. 9 kilograms
3. 3 boxes.

17RB1

John used a tape measure that was broken to measure the width of his desk. He measured the desk three times and reported this data. How wide is John's desk?

One side of desk	14cm	18cm	26cm
Other side of desk	95cm	99cm	107cm

18RS1

One week the Neato Shirt Company used 27,000 buttons. Three buttons weigh a gram.

1. How many grams do the 27,000 buttons weigh?
2. How many <u>kilograms</u> do the 27,000 buttons weigh?
3. The buttons are packaged in 3-kilogram boxes. How many boxes are needed for 27,000 buttons?

T 19RR1

1. 10 centimeters.
2. 110 centimeters.
3. 80 grams.
4. 30 centimeters.

T 20RM1

Your table could include these entries:

Days	1	2	3	4	5	6	
Pages read	1	2	4	8	16	32	

	10	11	12
	512	1024	2048

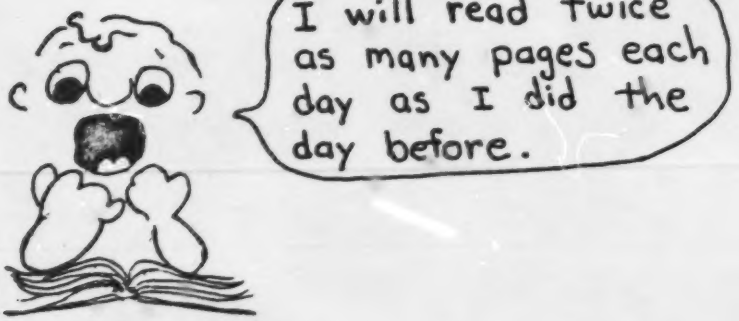
19RR1

Weight in grams	10	15	25	30	50	75	100
Length of spring (cm)	50	60	80	90	130	180	230

We measured the length of the spring for the weights and put the data in the table.
USE THE TABLE TO ANSWER THESE QUESTIONS.

1. How much does the spring stretch for each 5 grams we added to the weight?
2. How long would you expect the spring to be for a weight of 40 grams?
3. When the spring was 190 cm long, how much weight was on the spring?
4. How long is the spring when there is no weight placed on it?

20RM1



MAKE A TABLE WITH 5 MORE ENTRIES.

Days	1	2	3	
Pages read	1	2	4	

T 21RM1

Your table could have these entries:

Number of clips	100	1	2	3	200	300
Number of grams	105	1.05	2.1	3.15	210	315

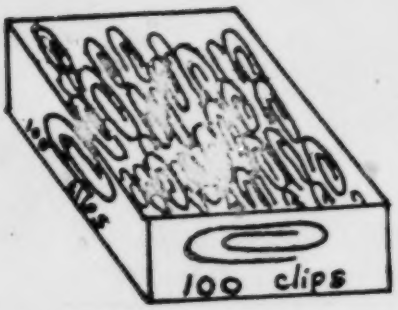
T 22RR1

1. 30cm
2. 120g

One team noticed that the spring stretched 1cm for every 2 grams of weight attached to the spring.

21RM1

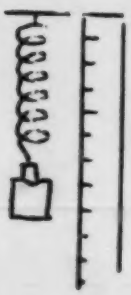
The filled box of paper clips weighs 107.3 grams. The empty box weighs 2.3 grams.



MAKE A TABLE WITH 5 MORE ENTRIES.

Number of clips			
Number of grams			

22RR1



Here is the data our science class collected.

Weight (g)	50	60	100
Length (cm)	15	20	40

USE THIS DATA TO ANSWER THESE QUESTIONS.

1. How long do you think the spring would be with a weight of 80 grams?
2. We stretched the spring to 50 centimeters. How much weight did we use?

T 23RC1

Distance Across	1	2	3	6	10	15
Distance Around	3.14	6.28	9.42	18.84	31.4	47.1

T 24RS1

Shirts	78	85	79	97	87
Buttons	390	425	395	485	435

1. 2130 buttons were used.
2. 2870 buttons were left.
3. Yes, they made 426 shirts and their goal was 425.

23RC1

COMPLETE THE TABLE.

Distance across	1	2	3	6	10	15
Distance around	3.14	6.28				

24RS1

THE NEATO SHIRT COMPANY MAKES A PULL-OVER SHIRT WHICH HAS FIVE BUTTONS. COMPLETE THE PRODUCTION TABLE.

	Mon.	Tues.	Wed.	Thurs.	Fri.
Shirts	78	85	79	97	87
Buttons					

1. How many buttons were used during the entire week?
2. The Neato Shirt Company had 5000 sport shirt buttons at the beginning of the week. How many were left at the end of the week?
3. The production goal was to average 85 shirts each day. Did they make their goal for the week?

T 25RB1

Station wagon	16	32	160	192	208
Gallons	1	2	10	12	13

We can go 208 miles on 13 gallons of gas in the station wagon.

Small car	26	52	208
Gallons	1	2	8

We can go 208 miles on 8 gallons of gas in the small car. We save 5 gallons of gas by taking the small car.

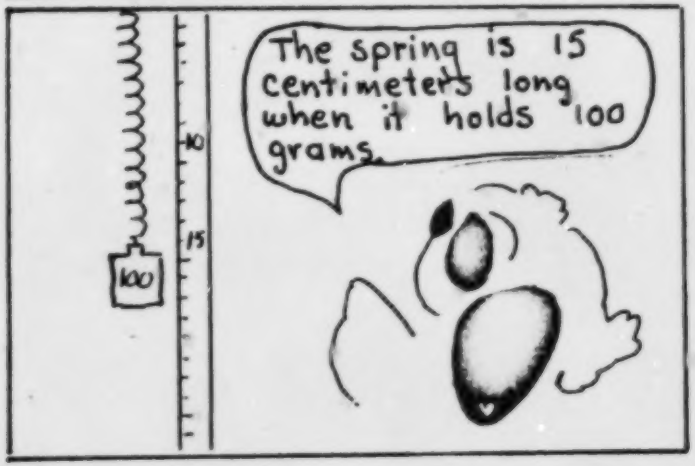
T 26RB1

This table should help:

Length of spring	10cm	15cm	20cm	25cm
Weight (in grams)	50	100	150	200

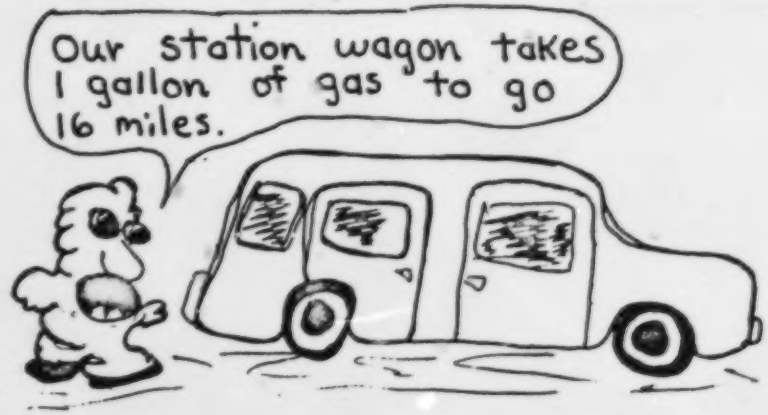
Adding 10 g of weight stretches the spring 1 cm.
Adding 100 g stretches the spring 10 cm.
The spring is 25 cm when it holds a 200 g weight.

26RB1



How long will the spring be when I attach a 200 gram weight?

25RB1



How many gallons of gas do we save by taking the small car rather than the station wagon on a 208 mile trip?

T 27RR1

1. 64 is 8 squared and 36 is 6 squared.
   64 + 36 = 100
2. 169 is 13 squared and 144 is 12 squared.
   169 - 144 = 25
3. 9 is 3 squared and 16 is 4 squared.
   9 + 16 = 25

T 28RS1

Worked	36	38	40	42	44	46
Paid	36	38	40	43	46	49

1. $242.88 (She is paid for 46 hours).
2. $258.72 (She is paid for 49 hours).
3. $200.64 (She is paid for 38 hours).

27RR1

Table of Squares

N	N x N	N	N x N	N	N x N	N	N x N
1	1	6	36	11	121	16	256
2	4	7	49	12	144	17	289
3	9	8	64	13	169	18	324
4	16	9	81	14	196	19	361
5	25	10	100	15	225	20	400

USE THE TABLE TO SOLVE THESE:

1. Find 2 squares whose sum is 100.
2. Find 2 squares whose difference is 25.
3. Find 2 squares whose sum is 25.

28RS1

Mrs. Stitch makes button holes for the Neato Shirt Company. When she works more than 40 hours in a week, she is paid 3 hours for working 2 hours. COMPLETE THE TABLE.

Worked	36	38	40	42	44	46
Paid	36	38	40	43		

Mrs. Stitch is paid $5.28 per hour. When she works 42 hours a week she is paid $227.04.

1. What is she paid when she works 44 hours?
2. What is she paid when she works 46 hours?
3. What is she paid when she works 38 hours?

T 16B1

This table should help:

Time	1 second	1 minute	30 minutes
Inches	7.5	450	13,500

13,500 inches
That is 1,125 feet.

T 26B1

The wheel goes about 6.8 feet for one turn.

There are 5280 feet in a mile.

5280 ÷ 6.8 = 772.7

The wheel will go around about 773 times in 1 mile.

HEY! HOW MANY TIMES WILL YOUR WHEEL GO AROUND IN A MILE?
FOR ONE TURN OF MY WHEEL I WENT 82 INCHES.
26B1

The man said this tape moves 7.5 inches every second.
16B1
How many inches of tape are there on a cassette that lasts 30 minutes?

T 3GS1

Rich either had 65 cents or 70 cents.

If he had 65 cents he could buy:
9 pieces for 15¢ and
35 pieces for 50¢.

If he had 70 cents he could buy:
30 pieces for 50¢ and
14 pieces for 20¢.

Pieces	3	6	9	12	15
Cost	5	10	15	20	25

Pieces	7	14	21	28	35
Cost	10	20	30	40	50

T 4GS1

Square feet	30	50	56	42
Skeins	12	20	23	17
Cost	$15.60	$26.00	$29.90	$22.10

1. 20 skeins
2. 23 skeins
3. $22.10

36S1

Rich bought two kinds of candy. One type sold at 3 pieces for 5 cents and the other kind sold at 7 pieces for 10 cents. He looked at the tables he made and said he had enough money to buy 44 pieces. How much money did he have?

Pieces	3		
Cost	5		

Pieces	7		
Cost	10		

46S1

The afghan I'm going to make is 6 feet by 5 feet and it will take 12 skeins of yarn ... and each skein costs $1.30.

Square feet	30	
Skeins	12	
Cost	$15.60	

1. How much yarn should I buy to make a 5 feet by 10 feet afghan?
2. How many skeins are needed to make a 7 feet by 8 feet afghan?
3. How much does it cost to make a 6 feet by 7 feet afghan?

T 56M1

Your table could include these entries:

Kilometers	192	10.5	39.7	882	105	210	315
Liters	18.3	1	3.78	84	10	20	30

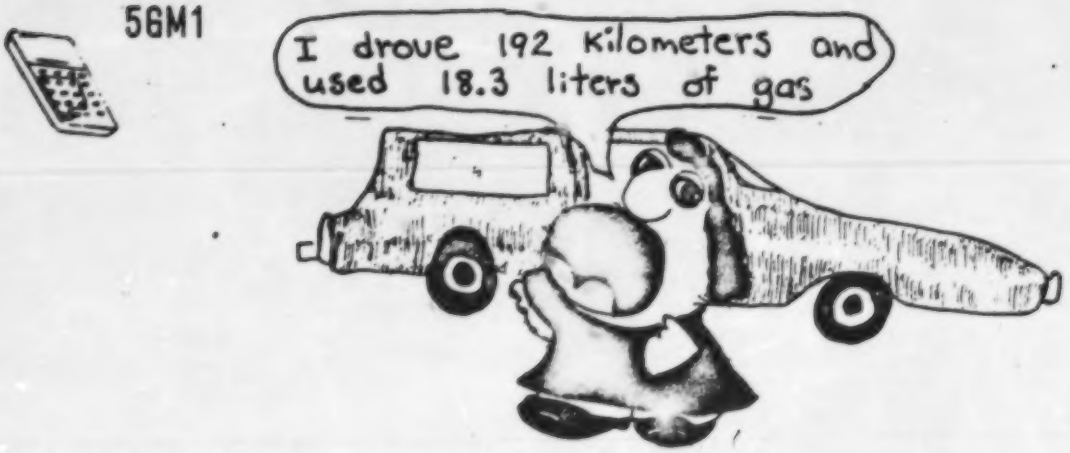
T 66S1

Dimes	1	2	3	4	5
Length	1.8	3.6	5.4	7.2	9.0

Quarters	1	2	3	4	5
Length	2.4	4.8	7.2	9.6	12.0

1. 10.8cm (3.6 + 7.2)
2. 3 dimes and 2 quarters (5.4 + 4.8)
3. 14.4cm (3 quarters and 4 dimes)

5GM1



MAKE A TABLE WITH 5 MORE ENTRIES.

Kilometers	192	
Liters	18.3	

6GS1

LINE UP COINS AND COMPLETE THE TABLE.

Dimes	1	2	3	4
Length (in cm)				

Quarters	1	2	3	4
Length (in cm)				

USE YOUR TABLE TO ANSWER THESE QUESTIONS.

1. How long is a line of coins made up of 2 dimes and 3 quarters?
2. Five coins, quarters and dimes, make a line that is 10.2 centimeters long. What coins are in the line?
3. A line of 7 coins is worth $1.15. How long is the line?

T 76S1

Pennies	4	5	6	7	8	9	10
Length	7.6	9.5	11.4	13.3	15.2	17.1	19.0

1. 6 pennies.
2. 52 or 53.
3. 95cm.

T 86R1

1. $\sqrt{4} = 2$, $\sqrt{9} = 3$

   $\sqrt{4} + \sqrt{9} = 2 + 3 = 5$

2. $\sqrt{14} - \sqrt{13} = 3.74 - 3.61 = .13$

3. $\sqrt{14 - 13} = \sqrt{1} = 1$

7GS1

LINE UP PENNIES AND USE YOUR METRIC RULER TO COMPLETE THE TABLE.

Number of pennies	4	5	6	7	8	9	10
Length in centimeters							

USE THE TABLE TO ANSWER THESE QUESTIONS:

1. If you had a line of pennies that was 11.4 cm long, how many pennies are in the line?
2. A meter is 100 cm long. How many pennies would it take to make a line 1 meter long?
3. A roll of pennies holds 50 pennies. How long a line can you make with 50 pennies?

8GR1

Table of Square Roots

N	$\sqrt{N}$	N	$\sqrt{N}$	N	$\sqrt{N}$	N	$\sqrt{N}$
1	1.00	6	2.45	11	3.32	16	4.00
2	1.41	7	2.65	12	3.46	17	4.12
3	1.73	8	2.83	13	3.61	18	4.24
4	2.00	9	3.00	14	3.74	19	4.36
5	2.24	10	3.16	15	3.87	20	4.47

USE THE TABLE TO DO THESE:

1. Find 2 numbers whose square roots add to 5.00.
2. Find $\sqrt{14} - \sqrt{13}$.
3. Find $\sqrt{14 - 13}$.

96C1

Jack Nicklaus can hit his 2 iron 220 yards. He hits each higher number club 12 yards less.

Club	2	3	4	5	6	7
Yards	220					

1. How far does he expect to hit his 7 iron?

2. What two clubs could Jack use from the tee to the green on this hole?

10GR1

USE THE TABLE TO PLAY THE TUBE-CUBE GAME.

Number of cubes	1	2	3	4	5	6
Number of corners	8	16	24	32	40	48
Number of faces	6	12	18	24	30	36
Number of edges	12	24	36	48	60	72

SOME CUBES ARE IN A TUBE. FIND HOW MANY CUBES ARE IN THE TUBE FROM THESE CLUES.

Game 1. There are 16 more edges than corners.

Game 2. Number of corners plus the number of faces plus the number of edges is 78.

Game 3. There are more than 30 edges, more than 30 corners, but less than 30 faces.

Game 4. There are less than 70 edges, less than 35 corners, and more than 19 faces.

T 96C1

Club	2	3	4	5	6	7
Yards	220	208	196	184	172	160

1. 160 yards.
2. 5 iron and a 2 iron.

T 106R1

Game 1. 4 cubes
Game 2. 3 cubes
Game 3. 4 cubes
Game 4. 4 cubes

T 96C1

Club	2	3	4	5	6	7
Yards	220	208	196	184	172	160

1. 160 yards.
2. 5 iron and a 2 iron.

T 106R1

Game 1. 4 cubes
Game 2. 3 cubes
Game 3. 4 cubes
Game 4. 4 cubes

96C1

Jack Nicklaus can hit his 2 iron 220 yards. He hits each higher number club 12 yards less.

Club	2	3	4	5	6	7
Yards	220					

1. How far does he expect to hit his 7 iron?

2. What two clubs could Jack use from the tee to the green on this hole?

106R1

USE THE TABLE TO PLAY THE TUBE-CUBE GAME.

Number of cubes	1	2	3	4	5	6
Number of corners	8	16	24	32	40	48
Number of faces	6	12	18	24	30	36
Number of edges	12	24	36	48	60	72

SOME CUBES ARE IN A TUBE. FIND HOW MANY CUBES ARE IN THE TUBE FROM THESE CLUES.

Game 1. There are 16 more edges than corners.

Game 2. Number of corners plus the number of faces plus the number of edges is 78.

Game 3. There are more than 30 edges, more than 30 corners, but less than 30 faces.

Game 4. There are less than 70 edges, less than 35 corners, and more than 19 faces.

T 116S1

1. You can turn twice as many pages in one minute as you turned in 30 seconds.
2. You turned about twice as many pages in 2 minutes as you could turn in one minute.
3. It would take her twice as long as you.

T 126S1

Your table should have these headings:

Number of minutes	1	10	60	1440
Number of heartbeats				

Your answers to questions 1, 2, and 3 depend on the number of heartbeats you counted in one minute.

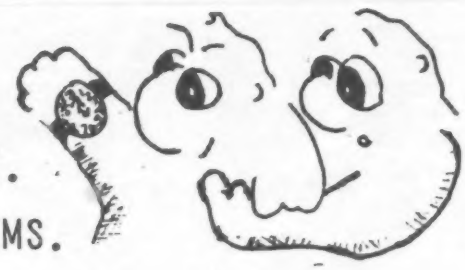
116S1

TURN ONE PAGE OF A BOOK AT A TIME AND TIME YOURSELF TO SEE HOW MANY PAGES YOU CAN TURN IN 30 SECONDS. RECORD YOUR DATA IN THE TABLE.

Pages			
Seconds	30		

1. How many pages can you turn in one minute?
2. You wrote your friend's new telephone number in the margin of a book. Later it took you 2 minutes of turning pages to find the number. About how many pages did you turn?
3. It takes your friend twice as long to page through a book. How long would it take her to page through a 160-sheet notebook?

126S1



COUNT YOUR HEARTBEATS FOR 1 MINUTE.

MAKE A TABLE TO SOLVE THESE PROBLEMS.

Number of minutes	
Number of heartbeats	

1. How many heartbeats do you expect to have in the next 10 minutes?
2. How many heartbeats in the next 60 minutes?
3. How many heartbeats in one day?

T 13GB1

$1328.59

After 1 year, $2250.
After 2 years, $2025.
After 3 years, $1822.50.
After 4 years, $1640.25.
After 5 years, $1476.22.
After 6 years, $1328.59.

T 14GM1

Your table could have these entries:

Revolutions of big wheel	1	2	3	4	.546	1.093
Revolutions of little wheel	1.83	3.66	5.49	7.32	1	2

Multiplying 1.83 times numbers in the top produces the numbers in the bottom row.

13GB1

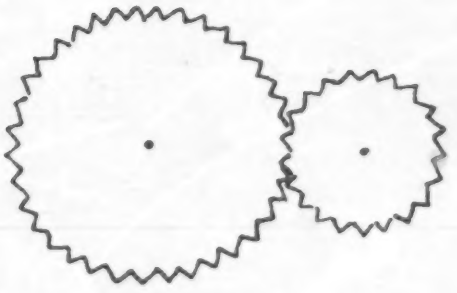
Our new 16-foot boat cost $2500. Dad says that each year it will be worth 10% less than the year before.

Worth	$2500						
Year	0	1	2	3	4	5	6

How much will it be worth when it is 6 years old?

14GM1

When the big wheel turns 1 revolution, the little wheel turns 1.83 revolutions.



MAKE A TABLE WITH 5 MORE ENTRIES.

Revolutions on big wheel	1			
Revolutions on little wheel	1.83			

T 156B1

Total time	1.5 sec.	3 sec.	60 sec.	60 min.	24 hours	1 year
Light on	.5 sec.	1 sec.	20 sec.	20 min.	8 hours	121.67 days

2920 hours

T 166B1

This table would help:

Year	1976	1956	1936	1916	1896	1636	1616
Generation	1	2	3	4	5	18	19
Number of relatives	2	4	8	16	32	262, 144	524, 288

156B1

The light on this building blinks for .5 second, is off for 1 second, then blinks for .5 second.

COMPLETE THE TABLE.

Total time	1.5 sec.	3 sec.	60 sec.	60 min.	24 hrs.	1 yr.
Time on	.5	1				

How many hours is the light on during a year?

166B1

There were 101 people that came across on the Mayflower in 1620. If you were a direct descendant of two of those people, how many relatives (include only father, mother, grandfather, grandmother, etc.) would you have since 1620? (Assume a new generation every 20 years.)

Year	1976	1956	1936			
Generation	1	2	3			
Number of relatives	2	4	8			

T 176C1

Cassette label	M30	M40	M60	M90
Length of tape	562.5	750	1125	1687.5

T 186R1

A new one costs more.

For a new one the charges are:

Zimp $20.00

Labor .7 x 12 . . . 8.40

total $28.40

For repairing and painting the old one:

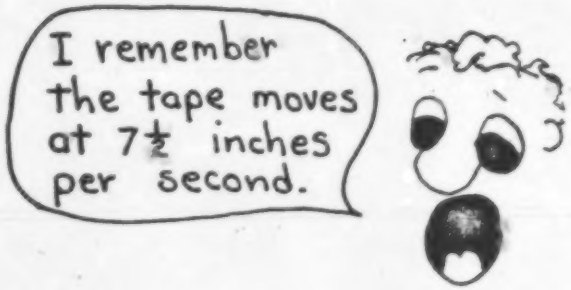
Repairing 1.9 x 12 . $22.80

Painting .3 x 12 . . 3.60

total $26.40

176C1

A 30 minute cassette plays 15 minutes on each side of the tape.



How many feet of tape is in each of these cassettes?

M30 cassettes play 15 minutes on each side. An M40 plays 20 minutes on each side.

Cassette label	M30	M40	M60	M90
Length of tape				

186R1

Joe's Fix-iT Shop Time Estimates	
Job	Hours
Replace gizmo	.6
Repair rutchle	2.3
Paint rutchle	.8
Replace zimp	.7
Repair zimp	1.9
Paint zimp	.3

A new zimp costs $20. Labor is $12 per hour.

What costs more:
replacing a damaged zimp with a new one or repairing and painting a zimp?

T 196M1

Your table could have these entries:

Revolutions on little wheel	2	1	3	100	2.17	217.4
Revolutions on big wheel	.92	.46	1.38	46	1	100

Multiply .46 times numbers in the top row to get numbers in the bottom row.

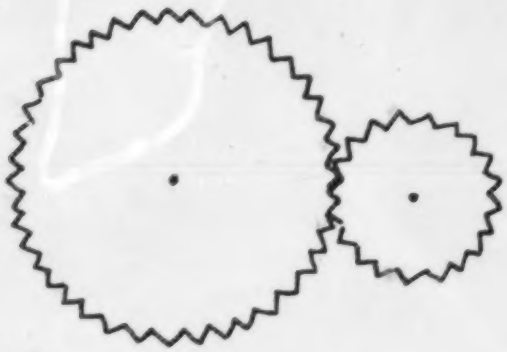
Divide numbers in the bottom row by .46 to get numbers in the top row.

T 206C1

Days	1	2	3	3	4
Miles	100	225	375	480	525
Total Bill	$41.95	$88.65	$140.10	$160.05	$191.55

196M1

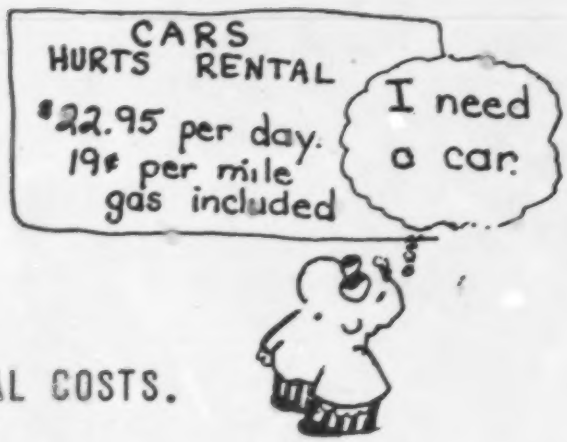
When the little wheel turns 2 revolutions, the big wheel turns .92 revolution.



MAKE A TABLE WITH 5 MORE ENTRIES.

Revolutions on little wheel	2			
Revolutions on big wheel	.92			

206C1



CALCULATE THE RENTAL COSTS.

Days	1	2	3	3	4
Miles	100	225	375	480	525
Total bill	$41.95				

T 216C1

Grade	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Amount of candy	$101.00	$205.00	$115.75	$97.25	$209.50
Profit for class	$20.20	$41.00	$23.15	$19.45	$41.90

T 226C1

Your tables will depend on the length of the strings you used.

Regardless of the length of the strings, your pendulum will will swing twice as many times in 2 minutes as it did in one minute.

216C1

If you sell our candy, your class will get 20% of the total sales.
CANDY
That means if we sell $48 worth of candy we get (.20)x(48) for the class.

Here are the amounts each class sold. Find how much profit they made.

Grade	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Amount of candy	$101.00	$205.00	$115.75	$97.25	$209.50
Profit for class	$20.20	$41.00			

What was the total profit for the school?

226C1

USE STRING AND A SMALL WEIGHT TO MAKE A PENDULUM. USE A WATCH AND COUNT THE SWINGS TO FILL IN THE TABLE.

Time in minutes	1	2	3	4	5
Swings of pendulum					

TRY A LONGER PENDULUM

Time in minutes	1	2	3	4	5
Swings of pendulum					

TRY A SHORTER PENDULUM.

Time in minutes	1	2	3	4	5
Swings of pendulum					

236C1

COMPLETE THE TABLE.

Distance across (cm)	1	5.2	4.37	.94	97.6
Distance around (cm)	3.14	16.33			

T 236C1

Distance across	1	5.2	4.37	.94	97.6
Distance around	3.14	16.33	13.72	2.95	306.46